

DOCUMENT RESUME

ED 458 701

EA 031 414

TITLE Retention and Attrition of Pacific School Teachers and Administrators (RAPSTA) Study: A Compilation of Reports. Research Series.

INSTITUTION Pacific Resources for Education and Learning, Honolulu, HI.; Research and Development Cadre, Honolulu, HI.

SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.

REPORT NO PREL-RS9907

PUB DATE 1999-11-00

NOTE 216p.; For individual reports, see ED 442 181-189 and EA 031 415.

CONTRACT RJ96006601

AVAILABLE FROM Pacific Resources for Education and Learning, Suite 2500, 1099 Alakea St., Honolulu, HI 96813. Tel: 808-941-1300; e-mail: askprel@prel.org; Web site: <http://www.prel.org>.

PUB TYPE Collected Works - General (020) -- Numerical/Quantitative Data (110) -- Reports - Research (143)

EDRS PRICE MF01/PC09 Plus Postage.

DESCRIPTORS Elementary Secondary Education; *Employee Absenteeism; *Faculty Mobility; *Teacher Attendance; Teacher Attitudes; *Teacher Morale

IDENTIFIERS American Samoa; Federated States of Micronesia (Chuuk); Federated States of Micronesia (Kosrae); Federated States of Micronesia (Pohnpei); Federated States of Micronesia (Yap); Guam; Hawaii; Marshall Islands; Maslach Burnout Inventory; Northern Mariana Islands; *Pacific Islands; Palau Islands

ABSTRACT

This report compiles results of studies conducted in American Samoa, Chuuk, the Commonwealth of the Northern Mariana Islands, Guam, Hawai'i, Kosrae, the Republic of the Marshall Islands, the Republic of Palau, Pohnpei, and Yap. It was conducted in the 1996-97 school year by Pacific Resources for Education and Learning in close collaboration with its Research and Development Cadre. The Retention and Attrition of Pacific School Teachers and Administrators Study tried to determine the risk factors for Pacific schoolteachers and administrators and identify which factors might lead to absenteeism, attrition, and stress/burnout. The average number of days teachers were away from school was 11, which is significantly higher than the U.S. national average of 7 sick and personal-leave days. For most of the 10 political entities, Pacific teachers and administrators did not appear to have workplace stress, according to the Maslach Burnout Inventory. In 9 out of 10 entities, administrators ranked retirement and low salaries as the top reasons they might leave the profession. Teachers ranked too much stress and no support from both central office and school administration as the primary reasons for leaving teaching. In 7 entities, teachers who said they might leave teaching in the next 2 years experienced higher degrees of stress and burnout than their peers. (Each paper contains references, tables, and figures.) (RKJ)

RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

A COMPILATION OF REPORTS

Research and Development Cadre

November 1999



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

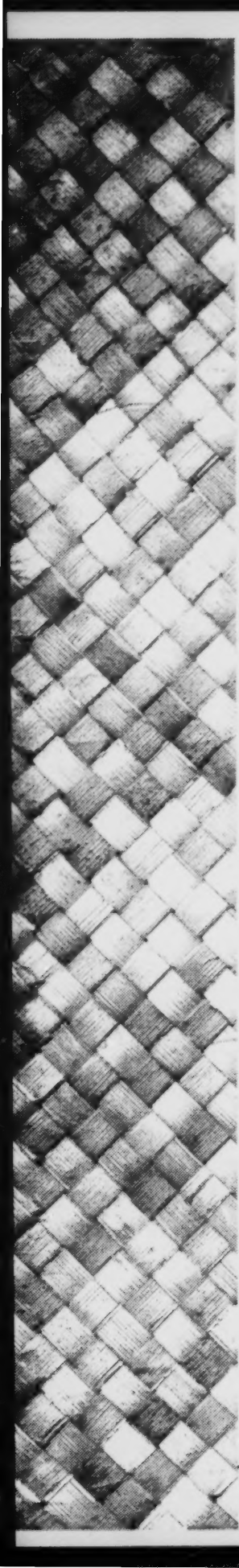
☐ Minor changes have been made to
improve reproduction quality.

☐ Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

RESEARCH SERIES

BEST COPY AVAILABLE

This publication was produced with funds from the Office of Educational Research and Improvement (OERI), U.S. Department of Education, under contract number RJ96006601. The content does not necessarily reflect the views of OERI, the Department, or any other agency of the U.S. Government.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

A COMPILATION OF REPORTS

- American Samoa
- Chuuk
- Commonwealth of the Northern Mariana Islands
- Guam
- Hawai'i
- Kosrae
- Republic of the Marshall Islands
- Republic of Palau
- Pohnpei
- Yap

Research and Development Cadre

November 1999



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813
Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org
WEBSITE: <http://www.prel.org>

Table of Contents

Overview	i
American Samoa	Section 1
Chuuk	Section 2
CNMI	Section 3
Guam	Section 4
Hawai'i	Section 5
Kosrae	Section 6
Republic of the Marshall Islands (RMI)	Section 7
Republic of Palau	Section 8
Pohnpei	Section 9
Yap	Section 10

Overview

In the 1996-97 school year, Pacific Resources for Education and Learning in close collaboration with its Research and Development (R&D) Cadre¹ conducted the Retention and Attrition of Pacific School Teachers and Administrators (RAPSTA) Study. With participation of all ten entities in PREL's service region² the study was designed to answer the following research questions:

- What are the risk factors that affect school teachers and administrators?
- What risk factors lead to absenteeism, attrition, and stress/burnout?

Prior to this study, PREL staff conducted an initial literature review of teacher risk factors (Hammond & Onikama, 1997). This review concluded that factors associated with teacher absenteeism, attrition, and stress/burnout were genuine concerns in the lives of teachers. In addition, Pacific island educators must also grapple with unique cultural, environmental and community circumstances.

Teacher Absenteeism

Among other significant findings, the RAPSTA studies showed that, across all entities, the average number of days teachers were away from school during the 1996-1997 school year was 11, ranging from 5 to 22. This is significantly higher than the United States national average of seven sick and personal leave days (Freeman & Grant, 1987). Although many teachers did not exceed the number of days allotted for their entity's leave policy, those who did went well beyond the acceptable number. Across all entities, the top 5 reasons teachers were away from the classroom included: personal illness, funerals, meetings and workshops, a sickness in the family, and vacation.

¹ The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

² PREL's service region is comprised of American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, and Yap), Guam, Hawaii, the Republic of the Marshall Islands, and the Republic of Palau.

Stress and Burnout

In general, except in a few entities, Pacific teachers and administrators did not appear to have workplace stress according to the Maslach Burnout Inventory³ (MBI). However, when correlating stress/burnout with Potential Leavers⁴, a significant relationship was found between teacher stress and the number of days away from school, though the study was not able to pinpoint the exact causes of absenteeism.

Teacher and Administrator Attrition

Teacher and administrator attrition data were collected to understand why educators might leave their jobs. Results varied between administrators and teachers.

Administrators in nine out of ten entities ranked retirement and low salaries as the top reasons why they might leave the profession. In eight entities, administrators reported that "No support from central administration," "Not enough school materials and supplies," and "Personal health problems" were reasons they might leave the profession.

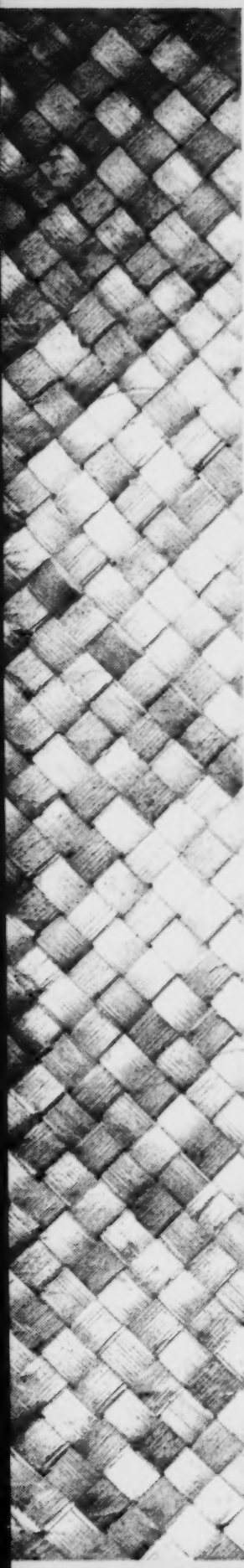
On the other hand, teachers in seven entities ranked "Too much stress" and "No support from both central office and school administration" as the primary reasons for leaving teaching. "Poor working conditions" and "Low salaries" were ranked as number two by six entities. Furthermore, results from the attrition section of the RAPSTA study indicated that in seven of the ten entities, teachers who said they might leave teaching within the next two years experienced higher degrees of stress and burnout than their non-leaving peers.

Development Activities

The findings of the RAPSTA were presented to a variety of constituencies and stakeholders in each of the entities by the respective R&D Cadre members. Many of the entities agreed that teacher absenteeism is a common problem in need of solutions. As a result, ministries and departments of education took action by reviewing their existing leave policies and exploring ways to address this issue. A policy report (*Where are the Teachers? A Policy Report on Teacher Absenteeism*, Uehara, 1999) was developed in collaboration with the R&D Cadre to provide information and research on successful practices and strategies to reduce teacher absenteeism.

³ The MBI is a 2-item, self-report inventory of three sub-scales, which were developed to measure dimensions that the authors felt best-defined burnout. These sub-scales include Low Personal accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

⁴ Potential Leavers was a category created for the purposes of analysis. Those who agreed with the statement, "I might leave teaching within the next two years," were labeled Potential Leavers.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

American Samoa

Research and Development Cadre

July 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	1-iii
Preface	1-iv
I. Introduction	1-1
II. Methods	1-3
III. Findings	1-7
IV. Discussion	1-11
V. Limitations	1-12
VI. Recommendations	1-14
References	1-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from American Samoa	1-4
2. Characteristics of RAPSTA School Administrator Sample from American Samoa	1-4
3. Reasons Why Teachers Are Away from School in American Samoa	1-7
4. Reasons Why School Administrators Are Away from School in American Samoa	1-7
5. Reasons for Leaving Teaching in American Samoa	1-8
6. Reasons for Leaving School Administration in American Samoa	1-9
7. MBI Subscale Mean Scores for American Samoa Teachers and School Administrators Compared to the Norm Sample	1-10
8. Cut-Off Scores for MBI Subscale Categories	1-10

List of Figures

1. Personal accomplishment among teachers in American Samoa 1-10
2. Emotional exhaustion among teachers in American Samoa 1-10
3. Depersonalization among teachers in American Samoa 1-10
4. Personal accomplishment among school administrators in American Samoa 1-11
5. Emotional exhaustion among school administrators in American Samoa 1-11
6. Depersonalization among school administrators in American Samoa 1-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resourcees for Education and Learning (PREL) staff who worked on this study—Li'a Amisone, Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Tafea Faauma Seui, Program Director for Special Projects, American Samoa Department of Education, for his guidance and assistance in carrying out this research in American Samoa. His efforts, along with those of participating school administrators and teachers, made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' edu-

cational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in research conducted in American schools. However, similar research is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Issues of particular interest to the American Samoa Department of Education (ASDOE) are its perceived high rates of teacher absenteeism and attrition. It is suspected that stress and burnout are the leading factors that cause teachers and school administrators to leave their jobs. ASDOE is also interested in understanding the relationships between these factors and other school variables (e.g., working conditions, administrative support, relations with parents, students behavior, and so on).

This study was designed to identify risk factors affecting educators in American Samoa and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some people in some entities. For example, a condition referred to as "Monday sickness" occurs when male teachers, especially those who are young and single, are absent from school after

a weekend of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up

action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In American Samoa, school administrators include principals, vice-principals, department heads, teaching vice-principals, and school counselors. Three hundred and forty-six teacher surveys and 50 school-administrator surveys were distributed in 14 schools across American Samoa. Two hundred-and-three completed teacher surveys were returned, resulting in a 59 percent response rate. Thirty-two school administrator surveys were returned, resulting in a 64 percent response rate. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from American Samoa

Demographic Characteristics		Number	Percentage*
Gender	Female	117	57.6
	Male	75	36.9
	No Response	11	5.4
	TOTAL	203	100.0
Ethnicity	Samoan	160	78.8
	Caucasian	9	4.4
	Chamorro	1	0.5
	Indian	2	1.0
	Japanese	1	0.5
	Tokelauan	1	0.5
	Other	3	1.5
	No Response	26	12.8
	TOTAL	203	100.0
Age	20-29	56	27.6
	30-39	60	29.6
	40-49	59	29.1
	50+	24	11.8
	No Response	4	2.0
	TOTAL	203	100.0
Marital Status	Never Married	64	31.5
	Married	124	61.1
	Separated	2	1.0
	Divorced	4	2.0
	Widowed	4	2.0
	No Response	5	2.5
	TOTAL	203	100.0
Education	HS Graduate	24	11.8
	Associate Degree	74	36.5
	Bachelor's Degree	78	38.4
	Master's Degree	9	4.4
	Other	7	3.4
	No Response	11	5.4
	TOTAL	203	100.0
Experience	1 - 4 Years	61	30.0
	5 - 10 Years	51	25.1
	11 - 14 Years	25	12.3
	15 - 20 Years	32	15.8
	20+ Years	18	8.9
	No Response	16	7.9
	TOTAL	203	100.0
Salary	<5,000	4	2.0
	5,000-9,999	41	20.2
	10,000-14,999	73	36.0
	15,000-19,999	47	23.2
	20,000-24,999	11	5.4
	25,000+	3	1.5
	No Response	24	11.8
	TOTAL	203	100.0

* Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married Samoan females, between the ages of 20 and 49, with either an associate (36.5%) or bachelor's (38.4%) degree and less than ten years of teaching experience.

Table 2
Characteristics of RAPSTA School
Administrator Sample from American Samoa

Demographic Characteristics		Number	Percentage*
Gender	Female	14	43.8
	Male	17	53.1
	No Response	1	3.1
	TOTAL	32	100.0
Ethnicity	Samoan	22	68.8
	Caucasian	1	3.1
	Hawaiian	1	3.1
	Maori	1	3.1
	Mixed	1	3.1
	No Response	6	18.8
	TOTAL	32	100.0
Age	20-29	0	0.0
	30-39	7	21.9
	40-49	17	53.1
	50+	8	25.0
	No Response	0	0.0
	TOTAL	32	100.0
Marital Status	Never Married	7	21.9
	Married	21	65.6
	Separated	0	0.0
	Divorced	0	0.0
	Widowed	2	6.3
	No Response	2	6.3
	TOTAL	32	100.0
Education	HS Graduate	0	0.0
	Associate Degree	4	12.5
	Bachelor's Degree	12	37.5
	Master's Degree	15	46.9
	Other	0	0.0
	No Response	1	3.1
	TOTAL	32	100.0
Experience	1 - 4 Years	3	9.4
	5 - 10 Years	4	12.5
	11 - 14 Years	4	12.5
	15 - 20 Years	6	18.8
	20+ Years	15	46.9
	No Response	0	0.0
	TOTAL	32	100.0
Salary	<5,000	1	3.1
	5,000-9,999	0	0.0
	10,000-14,999	1	3.1
	15,000-19,999	5	15.6
	20,000-24,999	16	50.0
	25,000+	8	25.0
	No Response	1	3.1
	TOTAL	32	100.0

* Percentages might not sum to exactly 100 due to rounding.

The majority of school administrators are married Samoan males, between 40 and 49 years of age, with a bachelor's (37.5%) or master's (46.9%) degree and more than 15 years of experience.

Sampling

To ensure a high response rate, the R&D Cadre decided to survey teachers and school administrators from representatively sampled schools. This process is referred to as cluster sampling, because clusters or groups of participants are being sampled. Since the general population of American Samoa is ethno-linguistically homogeneous, schools were selected to represent various geographic areas of the territory. Those sampled included: two elementary schools from the outer islands, three from the west district, two from the east district, and two from the central district; one junior high school from the central district; and four public high schools on the main island. In this way, the sample group represents a cross-section of the teacher and administrator population. Teachers and school administrators from 14 of American Samoa's 29 public schools were included in the sample.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status,

educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with

the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).

- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For exam-

ple, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

School administrators attended meetings that were facilitated by the American Samoa R&D Cadre member, with PREL staff assistance. The study was explained, and school administrators were given surveys to complete.

In turn, school administrators informed their teachers about the survey during faculty meetings, and surveys were distributed for teachers to complete. In order to ensure anonymity, the teachers were asked to put their completed surveys in large envelopes placed at designated locations throughout each school.

The data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys and for PREL staff to monitor the status of returned surveys. Surveys were collected by the local support team after being completed by each school's teachers and administrators. They were then forwarded to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in American Samoa. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in American Samoa were away from work, on average, for a total of 6.03 days. School administrators in the sample were away from work, on average, for a total of 7.87 days. Table 3 provides data on reasons why teachers were away from work and frequency of absence. Table 4 provides data on reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away from School in American Samoa

Rank	Reason	Average # of Days Away
1	Personal illness	2.17
2	Funerals	0.80
3	Family member sick	0.64
4	Maternity leave	0.41
5	Meetings and workshops	0.29
6	Child care	0.27
7	Other	0.22
8	Storm, heavy rain, flood, etc.	0.19
8	Family responsibilities	0.19
9	Military training	0.15
10	Church activities	0.11
11	Weddings	0.09
12	Training leave	0.08
12	Educational leave	0.08
12	Transportation problem	0.08
13	Vacation	0.06
13	Community responsibilities	0.06
14	Working conditions	0.03
14	Relationship with supervisors	0.03
15	Stress	0.02
15	Jury duty	0.02
15	Paternity leave	0.02
16	Relationship with co-workers	0.01
16	Administrative leave	0.01
17	Suspension	0.00
17	Lack of instructional materials	0.00
17	Birthdays	0.00
TOTAL		6.03

In American Samoa, personal illness was the leading cause of teacher absence from school, with an average of 2.17 days away. The next highest reason was funerals, with an average of 0.80 days; followed by a sick family member, with an average of 0.64 days.

Table 4
Reasons Why School Administrators Are Away from School in American Samoa

Rank	Reason	Average # of Days Away
1	Funerals	1.81
2	Personal illness	1.69
3	Meetings and workshops	1.00
4	Family member sick	0.66
5	Training leave	0.59
6	Vacation	0.38
7	Family responsibilities	0.28
8	Administrative leave	0.25
9	Child care	0.22
10	Weddings	0.16
10	Relationship with supervisors	0.16
10	Educational leave	0.16
10	Church activities	0.16
11	Storm, heavy rain, flood, etc.	0.13
11	Community responsibilities	0.13
12	Working conditions	0.03
12	Relationship with co-workers	0.03
12	Birthdays	0.03
13	Transportation problem	0.00
13	Suspension	0.00
13	Stress	0.00
13	Paternity leave	0.00
13	Other	0.00
13	Military training	0.00
13	Maternity leave	0.00
13	Lack of instructional materials	0.00
13	Jury duty	0.00
TOTAL		7.87

School administrators in American Samoa were most frequently away from school because of funerals, with an average of 1.81 days. This was followed closely by personal illness, with an average of 1.69 days, and meetings and workshops, with an average of 1.00 day.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-

type scale, from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In American Samoa, 25 percent (N=51) of teachers surveyed agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

Survey results in American Samoa are similar to results from research in other locations: low salaries and poor working conditions were given as two of the top five reasons for leaving, by teachers who were planning to leave the teaching field as well as by those who were not.

For each possible reason for leaving teaching, a statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and

Non-Leavers are different. Potential Leavers are more likely to leave for the following reasons: poor benefits, promotion, low salaries, pressure from the community, and too many responsibilities. It was also found that Potential Leavers are less likely than Non-Leavers to agree that they might leave because of retirement. These respondents might not plan on staying in the system until retirement.

In American Samoa, 44 percent (N=14) of school administrators surveyed agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave for leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

The top reasons for leaving school administration included low salaries, promotion, retirement, and personal health problems. These reasons were ranked among the top five by school administrators who were planning to leave, as well as those who were not.

Table 5
Reasons for Leaving Teaching in American Samoa

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	57.5	5	49.5	4
no support from school administration	46.9	9	39.1	8
no support from central office	33.0	4	46.9	5
too much stress	54.4	6	38.2	9
poor relationship with parents	23.4	16	20.0	14
students' bad attitudes	30.4	13	23.9	12
my lack of control over school policies	23.9	15	18.8	15
poor benefits **	63.8	3	37.5	10
personal health problems	47.8	8	55.8	3
too many disagreements about how to teach	26.1	14	21.4	13
not enough school materials and supplies	51.1	7	44.3	6
low salaries *	86.0	1	66.7	1
too many responsibilities *	40.4	11	24.8	11
pressure from the community *	31.9	12	15.0	16
retirement **	41.7	10	64.0	2
promotion **	66.7	2	43.2	7
poor relationship with teachers	17.4	17	12.5	17

* $p \leq .05$

** $p \leq .01$

20

Table 6
Reasons for Leaving School Administration in American Samoa

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	61.5	6	46.7	4
no support from school staff	46.2	8	46.7	4
no support from central office	53.9	7	46.7	4
too much stress	38.5	9	46.7	4
poor relationships with parents	23.1	11	33.3	6
students' bad attitudes	15.4	12	13.3	9
my lack of control over school policies	38.5	9	26.7	7
poor benefits	38.5	9	33.3	6
personal health problems	63.6	5	60.0	2
too many disagreements about how to run my school *	53.9	7	13.3	9
not enough school materials and supplies *	64.3	4	20.0	8
low salaries *	92.9	1	53.3	3
too many responsibilities	15.4	12	26.7	7
pressure from the community	30.8	10	20.0	8
retirement	84.6	2	53.3	3
promotion	69.2	3	66.7	1
poor relationship with teachers	0.0	14	20.0	8
poor relationship with staff	7.7	13	20.0	8
political reasons	46.2	8	40.0	5

* $p \leq .05$

For each possible reason for leaving school administration, a statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different. Potential Leavers are more likely to leave for the following reasons: too many disagreements about how to run the school, not enough materials and supplies, and low salaries.

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave education was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and the Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.

2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.
3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and the Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of mean scores for all teacher and school administrator respondents, with scores from the norm sample. In American Samoa, teachers experience a higher sense of personal accomplishment than both school administrators and the norm sample. In addition, they are not as emotionally exhausted nor do they feel as depersonalized as either of the two other groups. Teachers in American Samoa display a high degree of engagement in their work. School administrators feel less emotionally exhausted and depersonalized than the norm sample, yet may experience some aspects of occupational burnout as a result of a low sense of personal accomplishment in their jobs.

Table 7
MBI Subscale Scores for American Samoa Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size	Mean Score
Personal Accomplishment (PA)		
American Samoa Teachers	203	36.4
American Samoa School Administrators	32	31.5
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
American Samoa Teachers	203	18.4
American Samoa School Administrators	32	18.8
Norm Sample	4,163	21.3
Depersonalization (DP)		
American Samoa Teachers	203	5.1
American Samoa School Administrators	32	6.0
Norm Sample	4,163	11.0

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified as High, Moderate, or Low. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high lack of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. Teachers who might leave have a lower sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized than those who do not plan to leave. School adminis-

trators who might leave also have a lower sense of personal accomplishment and feel slightly more depersonalized than Non-Leavers. However, they are not as emotionally exhausted as their non-leaving peers.

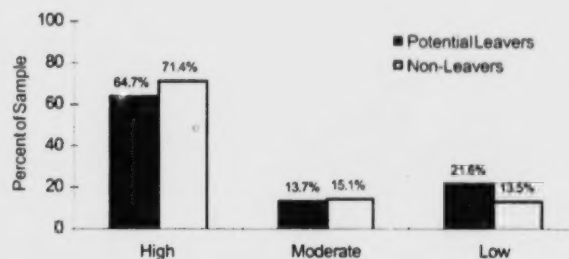


Figure 1. Personal accomplishment among teachers in American Samoa

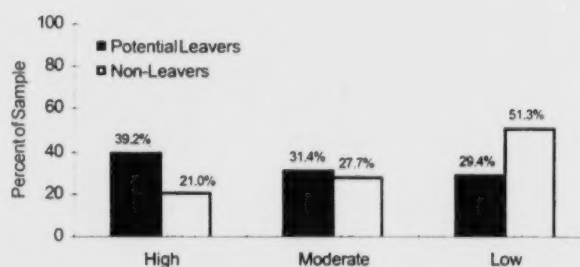


Figure 2. Emotional exhaustion among teachers in American Samoa

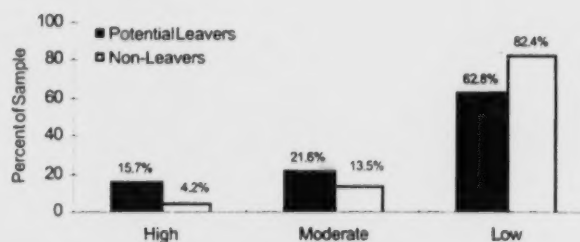


Figure 3. Depersonalization among teachers in American Samoa

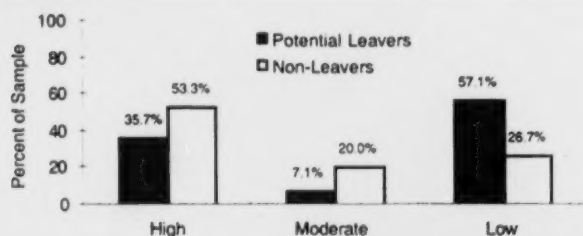


Figure 4. Personal accomplishment among school administrators in American Samoa

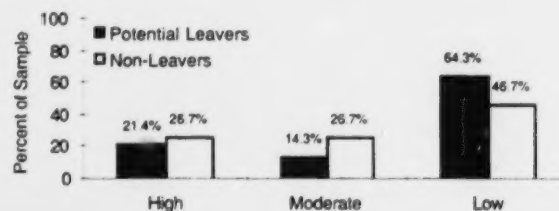


Figure 5. Emotional exhaustion among school administrators in American Samoa

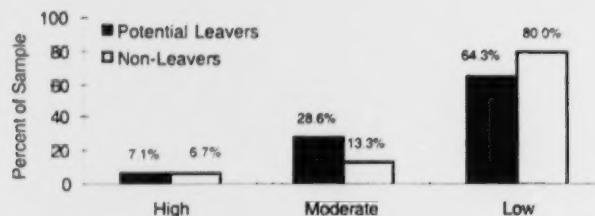


Figure 6. Depersonalization among school administrators in American Samoa

IV. Discussion

Absenteeism

Absenteeism among teachers and school administrators in American Samoa does not appear to be a problem. During the 1996-1997 school year, teachers were away from work, on average, a total of 6.03 days. Reasons for absences are those one would expect: personal illness, funerals, and a sick family member. These factors associated with absenteeism tend to be of immediate concern (Scott & Wimbush, 1991).

During the school year, administrators were away from work, on average, a total of 7.87 days. They were most frequently away from school due to funerals, personal illness, and meetings and workshops. The number of absences due to meetings and workshops (one day) was considerably less than findings reported in other entities.

Attrition

In American Samoa, 25 percent of teachers surveyed agreed that they might quit teaching within two years. For American Samoa's teachers in general, survey results are similar to research results from other locations: low salaries, poor benefits, and poor working conditions were given as the top reasons for leaving. For those who plan to leave, additional reasons include promotion, pressure from the community, and too many responsibilities. For these teachers, perhaps the stress associated with multiple responsibilities and perceived community pressure is too much to handle, given their perceptions of poor working conditions and low salaries.

Forty-four percent of school administrators surveyed plan to leave school administration within two years. Their top reasons for leaving include low salaries, retirement, personal health problems, and promotion. Promotion is a positive reason for

leaving because it indicates career advancement. Retirement is also not a negative reason for leaving school administration, as it is a natural part of any career. Low salaries have always been a problem in American Samoa, where school administrators are paid considerably less than in other entities such as Hawai'i, the Commonwealth of the Northern Mariana Islands, and Guam. Also, salaries tend to be unchanging in American Samoa, unless another degree is acquired or a higher-paying position is obtained.

Low salary is one problem area that distinguishes school administrators who might leave from those who plan to stay. Lack of materials and supplies and too many disagreements about how to run their schools are also significant reasons for leaving. Perhaps these reasons are indicative of the low sense of personal accomplishment reported.

Burnout

In American Samoa, teachers who are planning to leave have a lower sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized than those who are not planning to leave. For these teachers, occupational burnout appears to be a problem and might result in their leaving.

School administrators who are planning to leave have a lower sense of personal accomplishment and feel slightly more depersonalized than those who are not planning to leave. Those who plan to leave might also be suffering from some aspects of occupational burnout.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of its results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intend-

ed to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been trans-

posed so that the boxes were on the left.

2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents might leave and reasons that might cause them to leave, perhaps asking whether or not they were going to leave and why would have provided more definitive information.
3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

Sampling

Although teachers and school administrators from approximately half of the schools in American Samoa were selected for inclusion in this study, only 59 percent of the teachers and 64

percent of the school administrators returned surveys. The representativeness of these samples might have been compromised by non-response biases. For example, those who did not return surveys may have been more (or less) likely to be absent from school, leave the profession, or suffer from stress and burnout than those who responded. Non-response is usually considered a non-random process; it is assumed that systematic differences exist between those who responded and those who did not. Therefore, results from this study in American Samoa should be interpreted with caution.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in American Samoa. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

As stated in the discussion section, absenteeism among teachers and school administrators does not appear to be a problem in American Samoa. The average number of days away from school for teachers is 6.03. The average number of days away from school for administrators is 7.87 days. However, initial interest in this study came from the ASDOE's concern about high rates of absenteeism. Perhaps educators with higher numbers of absences were among those who did not return surveys. One way to get a clearer picture of absenteeism among educators in American Samoa is to compare school and district personnel records with findings from this study.

Recommendations Regarding Findings on Attrition

1. As a way of contributing to staff stability, a pro-active program aimed at reducing the attrition rate of teachers and school administrators should be designed and implemented by the public school system. This program might include strategies to help teachers juggle multiple responsibilities and the demands of their communities. It could also provide school administrators with techniques for stretching their limited resources, and suggest ways to reach agreement about school management. Staff stability can contribute to improved student performance and achievement.
2. In addition, results of this study indicate that plans should be made for recruitment, training, and replacement of educational personnel, especially school administrators.

Recommendations Regarding Findings on Stress/Burnout

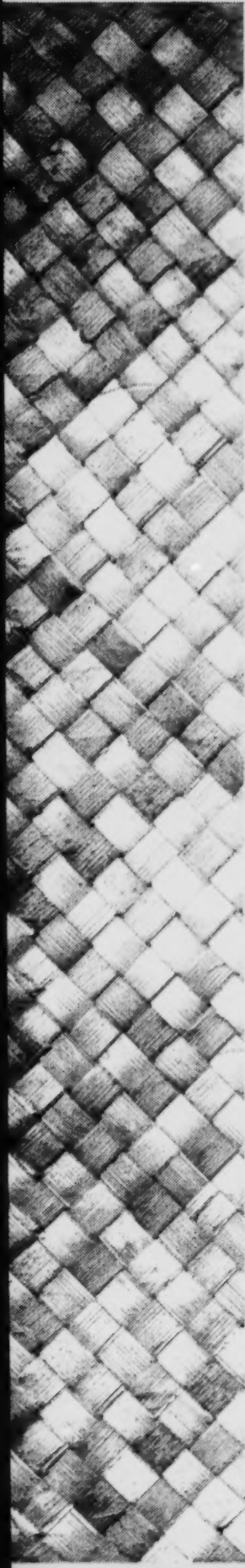
1. More teachers than school administrators experience occupational burnout. A com-

prehensive program to reduce stress and burnout among teachers in the American Samoa public school system should be designed and implemented. Intervention of this type could increase educators' engagement in their work, and may lead to improved attendance, lower attrition rates, and the improved well-being of those professionals who work most closely with students.

2. The causes and effects of a low sense of personal accomplishment among school administrators in American Samoa, especially among those who are planning to leave, may warrant further study. An investigation could uncover factors associated with this problem, and it might discover reasons why administrators feel that there are too many disagreements about how to run their schools.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, Volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Chuuk State, Federated States of Micronesia

Research and Development Cadre

June 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	2-iii
Preface	2-iv
I. Introduction	2-1
II. Methods	2-3
III. Findings	2-7
IV. Discussion	2-11
V. Limitations	2-13
VI. Recommendations	2-14
References	2-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from Chuuk State	2-4
2. Characteristics of RAPSTA School Administrator Sample from Chuuk State	2-4
3. Reasons Why Teachers Are Away from School in Chuuk State	2-7
4. Reasons Why School Administrators Are Away from School in Chuuk State	2-7
5. Reasons for Leaving Teaching in Chuuk State	2-8
6. Reasons for Leaving School Administration in Chuuk State	2-9
7. MBI Subscale Mean Scores for Chuuk State Teachers and School Administrators Compared to the Norm Sample	2-9
8. Cut-Off Scores for MBI Subscale Categories	2-10

List of Figures

1. Personal accomplishment among teachers in Chuuk State	2-10
2. Emotional exhaustion among teachers in Chuuk State	2-10
3. Depersonalization among teachers in Chuuk State	2-10
4. Personal accomplishment among school administrators in Chuuk State	2-11
5. Emotional exhaustion among school administrators in Chuuk State	2-11
6. Depersonalization among school administrators in Chuuk State	2-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre members Peter James and Eric Marar, Chuuk State Department of Education, for their guidance and leadership in carrying out this research in Chuuk State. Their efforts, along with those of the Chuuk State local R&D support team—Miasiro Albert, Rufino Eram, Jacinta Felix, Gaspar R. Fred, Johndy Nakamura, Keres Petrus, Francis Sain, and Ermine Walliby—made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no

substitute teacher pool is available, students' educational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in the research literature. However, research on this topic is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Of particular interest to the Chuuk Department of Education is the possible relationship between students' academic achievement and the absenteeism, attrition, and stress/burnout rates among teachers and school administrators. Student achievement in Chuuk State has been steadily declining over the years. This decline is evident in high-school graduates' poor performance on the annual College of Micronesia-Federated States of Micronesia entrance test and in the low Grade 8 scores on the Chuuk State Department of Education Junior High Entrance Test. These test results have potentially negative implications for teachers and school administrators in Chuuk State. For this reason, Chuuk State was interested in participating in the study.

This study was designed to identify risk factors affecting educators in Chuuk State and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American

Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some

people in some entities. For example, a condition referred to as "Monday sickness," occurs when male teachers, especially those who are young and single, are absent from school after a weekend of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers,

and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In Chuuk State, 170 teacher surveys were distributed, and 124 completed surveys were returned, resulting in a response rate of 73 percent. Fifty-one school administrator surveys were distributed, and 38 completed surveys were returned, resulting in a response rate of 75 percent. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from Chuuk State

Demographic Characteristics	Number	Percentage*
Gender		
Female	41	33.1
Male	74	59.7
No Response	9	7.3
TOTAL	124	100.0
Ethnicity		
Caucasian	1	0.8
Chuukese	119	96.0
Other	0	0.0
No Response	4	3.2
TOTAL	124	100.0
Age		
20-29	6	4.8
30-39	24	19.4
40-49	73	58.9
50+	21	16.9
No Response	0	0.0
TOTAL	124	100.0
Marital Status		
Never Married	2	1.6
Married	113	91.1
Separated	2	1.6
Divorced	0	0.0
Widowed	4	3.2
No Response	3	2.4
TOTAL	124	100.0
Education		
HS Graduate	22	17.7
Associate Degree	60	48.4
Bachelor's Degree	28	22.6
Master's Degree	1	0.8
Other	4	3.2
No Response	9	7.3
TOTAL	124	100.0
Experience		
1 - 4 Years	3	2.4
5 - 10 Years	17	13.7
11 - 14 Years	20	16.1
15 - 20 Years	44	35.5
20+ Years	32	25.8
No Response	8	6.5
TOTAL	124	100.0
Salary		
< 4,000	12	9.7
4,000 - 4,999	24	19.4
5,000 - 5,999	44	35.5
6,000 - 6,999	15	12.1
7,000 - 7,999	9	7.3
8,000+	10	8.1
No Response	10	8.1
TOTAL	124	100.0

*Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married Chuukese males, between the ages of 40 and 49 years, with an associate (48.4%) or bachelor's (22.6%) degree and more than fifteen years of experience.

Table 2
Characteristics of RAPSTA School
Administrator Sample from Chuuk State

Demographic Characteristics	Number	Percentage*
Gender		
Female	3	7.9
Male	32	84.2
No Response	3	7.9
TOTAL	38	100.0
Ethnicity		
Chuukese	36	94.7
No Response	2	5.3
TOTAL	38	100.0
Age		
35-39	3	7.9
40-44	6	15.8
45-49	11	29.0
50-54	9	23.7
55-59	8	21.1
No Response	1	2.5
TOTAL	38	100.0
Marital Status		
Never Married	2	5.3
Married	35	92.1
Separated	0	0.0
Divorced	0	0.0
Widowed	1	2.6
No Response	0	0.0
TOTAL	38	100.0
Education		
HS Graduate	4	10.5
Associate Degree	24	63.2
Bachelor's Degree	10	26.3
Master's Degree	0	0.0
Advanced Degree	0	0.0
No Response	0	0.0
TOTAL	38	100.0
Experience		
1 - 4 Years	2	5.3
5 - 10 Years	2	5.3
11 - 14 Years	4	10.5
15 - 20 Years	8	21.1
20+ Years	22	57.9
No Response	0	0.0
TOTAL	38	100.0
Salary		
< 4,000	1	2.6
4,000-4,999	3	7.9
5,000-5,999	2	5.3
6,000-6,999	3	7.9
7,000-7,999	15	39.5
8,000+	11	28.9
No Response	3	7.9
TOTAL	38	100.0

*Percentages might not sum to exactly 100 due to rounding.

Almost all school administrators are married Chuukese males, between the ages of 45 and 59 years, with an associate (63.2%) or bachelor's (26.3%) degree and more than twenty years of experience.

Sampling

To ensure a high response rate and fairly represent the targeted population, the R&D Cadre decided to survey all teachers and school administrators from representatively sampled schools across the state. This process is referred to as *cluster sampling*. Schools sampled included three from the most populated region, Northern Namoneas; two from Southern Namoneas; two from Mortlock; two from Faichuk; and one from the least populated region, Western Island.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely, as a means of measuring employee stress/burnout. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings

about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teach-

ing job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

Members of the local R&D Cadre visited the selected schools and administered the surveys in group settings. All items on the form were read aloud to participants, whose identities were not required on the survey instruments.

The data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys and time for PREL staff to follow up on the status of returned surveys. Surveys were collected after being completed by each school's teachers and administrators. The local support team collected the completed surveys, then forwarded them to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in Chuuk State. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition within the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in Chuuk State were away from work, on average, for a total of 22.36 days. School administrators were away from work, on average, for a total of 42.43 days. Table 3 provides reasons why teachers were away from work and frequency of absence. Table 4 provides reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away from School in Chuuk State

Rank	Reason	Average # of Days Away
1	Personal illness	4.93
2	Funerals	3.44
3	Family member sick	2.76
4	Administrative leave	1.47
5	Maternity leave	1.15
6	Storm, heavy rain, flood, etc.	1.00
7	Vacation	0.88
8	Family responsibilities	0.84
9	Child care	0.77
10	Meetings and workshops	0.73
11	Church activities	0.69
12	Other	0.66
13	Training leave	0.65
14	Transportation problem	0.61
15	Community responsibilities	0.57
16	Educational leave	0.23
17	Working conditions	0.22
18	Birthdays	0.19
18	Relationship with supervisors	0.19
19	Stress	0.11
20	Lack of instructional materials	0.07
20	Weddings	0.07
20	Jury duty	0.07
21	Paternity leave	0.05
22	Relationship with co-workers	0.01
23	Suspension	0.00
23	Military training	0.00
TOTAL		22.36

In Chuuk State, personal illness was the leading cause of teacher absence from school, with an average of 4.93 days away. The next highest reason was funerals, with an average of 3.44 days; followed by sickness in the family, with an average of 2.76 days.

Table 4
Reasons Why School Administrators Are Away from School in Chuuk State

Rank	Reason	Average # of Days Away
1	Other	9.42
2	Meetings and workshops	5.66
3	Funerals	5.08
4	Personal illness	3.03
5	Family member sick	2.97
6	Storm, heavy rain, flood, etc.	1.97
7	Church activities	1.79
8	Administrative leave	1.71
9	Lack of instructional materials	1.61
10	Family responsibilities	1.55
11	Training leave	1.32
12	Working conditions	1.24
13	Vacation	1.18
14	Paternity leave	1.05
15	Community responsibilities	0.87
16	Stress	0.39
17	Child care	0.29
18	Relationship with supervisors	0.24
19	Transportation problem	0.21
19	Relationship with co-workers	0.21
19	Birthdays	0.21
20	Maternity leave	0.16
20	Educational leave	0.16
21	Weddings	0.11
22	Suspension	0.00
22	Military training	0.00
22	Jury duty	0.00
TOTAL		42.43

Chuuk State school administrators were most frequently away from school due to "other" reasons, with an average of 9.42 days away. Survey respondents cited administrative tasks at the district office as "other" reasons. The next highest reasons were meetings and workshops, with an average of 5.66 days, and funerals, with an average of 5.08 days.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly dis-

agree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In Chuuk State, 17.74 percent (N=22) of the surveyed teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

No support from school administration, no support from central office, personal health problems, and low salaries are among the top reasons for leaving teaching in Chuuk State. These reasons were ranked among the top five by teachers who are planning to leave as well as by those who are not.

A statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different when looking at each possible reason for leaving teaching. Potential Leavers are more likely to leave for the

following reasons: no support from school administration, too much stress, lack of control over school policies, and too many responsibilities.

In Chuuk State, 25 percent (N=10) of the surveyed school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave for potentially leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

The top reason for leaving school administration, retirement, is ranked number one by school administrators who are planning to leave as well as by those who are not. There are many other reasons why Potential Leavers might leave school administration, and these reasons differentiate them from Non-Leavers (see rankings in Table 6). A statistical test (χ^2) was performed to determine if the response patterns of Potential Leavers and Non-Leavers are different for each possible reason for leaving school administration. Results of the test indicated that Potential Leavers were more likely to leave because of the following reasons: poor relationships with parents and poor relationships with teachers.

Table 5
Reasons for Leaving Teaching in Chuuk State

If I quit teaching, it would be because of . . .	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	68.2	6	46.0	9
no support from school administration *	85.7	1	60.5	4
no support from central office	81.8	2	71.8	2
too much stress *	72.7	3	44.6	11
poor relationship with parents	36.4	12	33.3	14
students' bad attitudes	38.1	11	46.1	8
my lack of control over school policies *	47.6	10	22.7	17
poor benefits	70.0	5	52.8	7
personal health problems	71.4	4	60.3	5
too many disagreements about how to teach	23.8	13	35.2	13
not enough materials and supplies	63.6	8	57.3	6
low salaries	72.7	3	76.6	1
too many responsibilities *	52.4	9	28.4	15
pressure from the community	38.1	11	38.7	12
retirement	65.0	7	67.6	3
promotion	65.0	7	45.8	10
poor relationship with other teachers	19.1	14	23.0	16

* $p \leq .05$

** $p \leq .01$

Table 6
Reasons for Leaving School Administration in Chuuk State

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	62.5	5	36.0	11
no support from school staff	75.0	3	44.4	8
no support from central office administration	77.8	2	70.4	2
too much stress	55.6	6	30.8	13
poor relationships with parents **	75.0	3	22.2	16
students' bad attitudes	33.3	9	24.0	15
my lack of control over school policies	62.5	5	26.9	14
poor benefits	55.6	6	57.7	5
personal health problems	75.0	3	66.7	3
too many disagreements about how to run my school	66.7	4	38.5	10
not enough school materials and supplies	55.6	6	50.0	7
low salaries	77.8	2	63.0	4
too many responsibilities	44.4	8	42.3	9
pressure from the community	50.0	7	34.6	12
retirement	87.5	1	74.1	1
promotion	33.3	9	44.4	8
poor relationship with teachers **	66.7	4	18.5	17
poor relationship with staff	44.4	8	15.4	18
political reasons	44.4	8	51.9	6

* $p \leq .05$

** $p \leq .01$

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave the education field was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.
3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of mean scores for all teacher and school administrator respondents, with scores from the norm sample. Chuuk State teachers and school administrators experi-

ence a lower sense of personal accomplishment than the norm sample. In addition, teachers are more emotionally exhausted than both school administrators and the norm sample. Both teachers and school administrators feel less depersonalized than the norm sample.

School administrators feel less emotional exhaustion and depersonalization than both teachers and the norm group. However, they also feel less personal accomplishment than the two groups.

Table 7
MBI Subscale Scores for Chuuk State Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size*	Mean Score
Personal Accomplishment (PA)		
Chuuk State Teachers	124	31.6
Chuuk State School Administrators	35	31.2
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Chuuk State Teachers	124	22.2
Chuuk State School Administrators	34	20.4
Norm Sample	4,163	21.3
Depersonalization (DP)		
Chuuk State Teachers	124	8.2
Chuuk State School Administrators	32	8.9
Norm Sample	4,163	11.0

*Sample sizes vary due to non-responses.

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into High, Moderate, and Low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high *lack* of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. Among Chuuk State teachers who might leave, most display either high or low levels of personal accomplishment. They also feel more emotionally exhausted and more depersonalized than Non-Leavers. School administrators who might leave show a lower level of personal accomplishment, are less emotionally exhausted, and feel more depersonalized than their non-leaving peers.

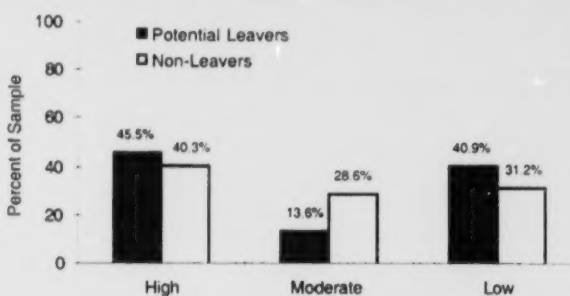


Figure 1. Personal accomplishment among teachers in Chuuk

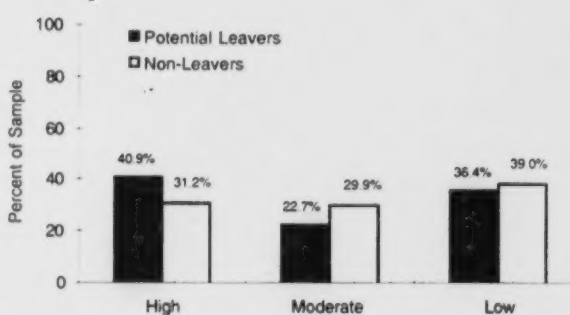


Figure 2. Emotional exhaustion among teachers in Chuuk State

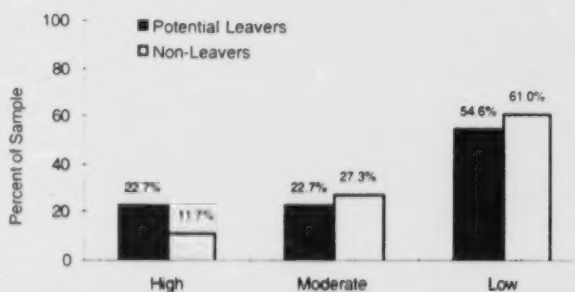


Figure 3. Depersonalization among teachers in Chuuk State

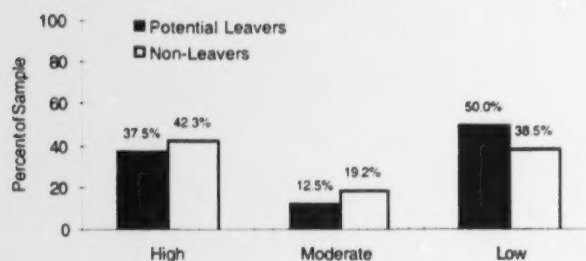


Figure 4. Personal accomplishment among school administrators in Chuuk State

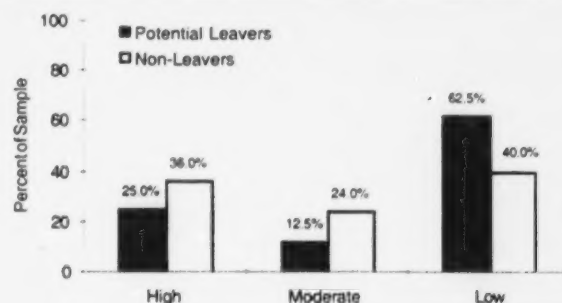


Figure 5. Emotional exhaustion among school administrators in Chuuk State

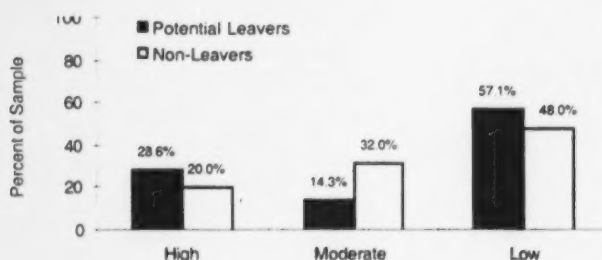


Figure 6. Depersonalization among school administrators in Chuuk State

IV. Discussion

Absenteeism

Absenteeism among teachers and school administrators in Chuuk State appears to be a problem. For example, teachers are away from work an average of 22.36 days. School administrators are away from work an average of 42.43 days. These numbers are the highest across all of PREL's entities in the Pacific region.

Teacher absences are due primarily to personal illness, funerals, and sick family members, reasons that tend to be of immediate concern to teachers (Scott & Wimbush, 1991). The number of days away due to personal illness (4.93) is also the highest reported by any entity. It was suggested that some of the reported personal illnesses may be the result of heavy drinking the previous day, and teachers do not report to work due to a hangover, a condition commonly referred to as "Monday

sickness." In addition, funerals are culturally sanctioned occasions that often require participation in events that may take place during school hours.

School administrator absences are most often due to administrative tasks at the central office ("other" reasons), averaging 9.42 days away; meetings and workshops, 5.66 days; and funerals, 5.08 days. These professional obligations are not under the direct control of school administrators but require their attention. Administrative tasks cited include dropping off time sheets and picking up pay checks.

Field observations made by the Chuuk State local support team members indicated that in many cases, completed surveys were not returned because educators "simply were not around when the schools were visited." During the course of a week, the team returned to many schools on neigh-

boring islands, but educators at these schools were gone for extended periods of time. Thus, findings on absenteeism reported in the data may appear lower than they actually are. This is unfortunate, as the number of days away from school by Chuuk State educators is already reported to be extremely high.

Attrition

Eighteen percent of teachers agreed with the statement, "I plan to leave teaching within the next two years." The top reasons selected for leaving were lack of support from school administration and low salaries, both ranked among the top five by teachers who were planning to leave as well as by those who were not. Potential Leavers are more likely to leave for the following reasons: no support from school administration, too much stress, lack of control over school policies, and too many responsibilities. It was suggested by some Chuukese educators that in instances where the relationship between principal and teacher is strained, the working environment may be difficult for the teacher. Furthermore, because of difficulties accessing remote islands, central office responses to requests for supplies and materials may be delayed, thus causing more frustration. Although many teachers are nearing retirement age, retirement was not a reason cited for leaving teaching within the next two years.

Low salaries have been a problem for several years. Teachers often leave Chuuk in order to teach in places that offer higher salaries, such as Guam and the CNMI, or they leave teaching altogether for a higher-paying position in another department.

Among school administrators, both Potential Leavers and Non-Leavers are likely to cite retirement as a reason for leaving the public school system. Among the 25 percent of school administrators who may leave within the next two years,

retirement was the top reason cited for leaving. It was also ranked number one by those who are not leaving. As most of the Chuuk State school administrators in this study are over the age of 45 and have more than twenty years of experience, many are approaching retirement.

There are also other reasons why Potential Leavers might leave school administration, including poor relationships with parents and teachers. Among the ten entities, this finding was unique to Chuuk State administrators and might warrant further investigation.

Burnout

Approximately 18 percent of Chuuk State teachers might leave within the next two years; most of them report either a high or low sense of personal accomplishment, but more emotional exhaustion and more depersonalization at work than those who plan to stay. Many of the teachers who might leave teaching in Chuuk State appear to experience some aspects of occupational burnout.

Twenty-five percent of Chuuk State school administrators might leave within the next two years; they experience a lower sense of personal accomplishment and feel more depersonalized, but are less emotionally exhausted. Thus, school administrators who might leave also experience some aspects of occupational burnout.

The common reasons given for leaving teaching or school administration are lack of support (either from school administration or central office) and low salaries. Teachers also cited too much stress, and school administrators mentioned retirement as a top reason for leaving. Even though teachers might feel that they are putting forth their best efforts, which might account for those who have a high level of personal accomplishment, low salaries and lack of support cause frustration and resentment. This might then lead to occupational burnout.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item, and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their

responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved

the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.
2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents *might* leave and reasons that *might* cause them to leave, perhaps asking whether or not they were going to leave and *why* would have provided more definitive information.
3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers,

only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in Chuuk State. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on

Absenteeism

Absenteeism among teachers and school administrators in Chuuk State appears to be a problem. Teachers are away from work, on average, a total of 22.36 days. School administrators are away from work, on average, a total of 42.43 days. These numbers are the highest in all the entities. Although some absences might have occurred for valid reasons, the very high rates of absenteeism for both teachers and school administrators are problematic. This condition is even more acute

in light of data-collection visits by the Chuuk State local support team, who found that many educators were not at school during the time periods when surveys were distributed and collected. The difficulties associated with these high rates of absenteeism are compounded by the fact that no substitute teachers or administrators are available in Chuuk.

It is therefore recommended that the need to improve the school attendance of Chuuk State educators be seriously considered. Existing attendance policies should be reviewed for appropriate action. In the absence of current attendance policies, written policies should be developed and consistently implemented through an appropriate accountability system that includes sanctions and rewards. For children to make academic progress, they need guidance and leadership from their teachers and school administrators; these educators provide necessary and important instruction, both verbally and by example.

Recommendations Regarding Findings on Attrition

In Chuuk State, there are numerous reasons for teachers to leave the teaching field: no support from school administration, too much stress, lack of control over school policies, and too many responsibilities. For school administrators,

Potential Leavers are more likely to leave because of poor relationships with parents and teachers. This finding is unique to Chuuk State administrators and might warrant further study.

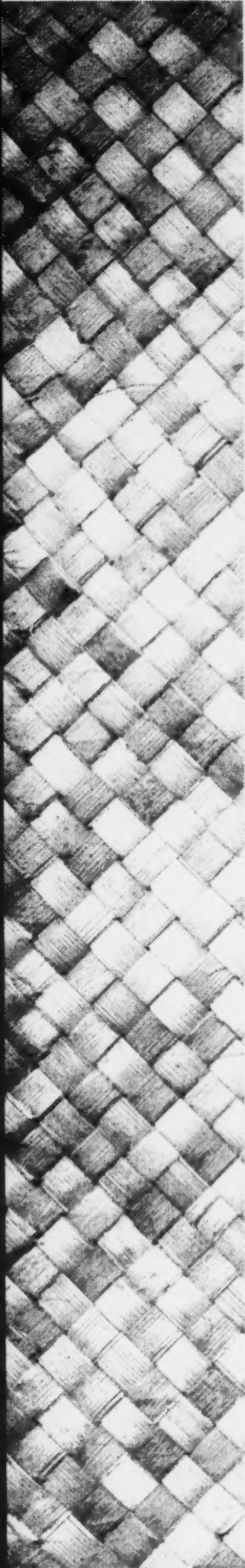
To contribute to staff stability, a pro-active program aimed at reducing the attrition rate of teachers and school administrators should be designed and implemented by the public school system. Staff stability, in turn, might contribute to better student performance and achievement.

Recommendations Regarding Findings on Stress/Burnout

In Chuuk State, teachers who might leave within the next two years reported more emotional exhaustion and depersonalization at work. Some also experience low levels of personal accomplishment. School administrators who might leave experience a lower sense of personal accomplishment and a higher feeling of depersonalization. These findings reflect some aspects of occupational burnout; therefore, it is recommended that a comprehensive program to reduce stress and burnout among educators in the Chuuk State public school system should be designed and implemented. Such a program could contribute to improved attendance and the well-being of those who work most closely with students.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, Volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

**Commonwealth of the Northern Mariana Islands
(CNMI)**

Research and Development Cadre

May 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	3-iii
Preface	3-iv
I. Introduction	3-1
II. Methods	3-3
III. Findings	3-7
IV. Discussion	3-11
V. Limitations	3-12
VI. Recommendations	3-14
References	3-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from the CNMI	3-4
2. Characteristics of RAPSTA School Administrator Sample from the CNMI	3-4
3. Reasons Why Teachers Are Away from School in the CNMI	3-7
4. Reasons Why School Administrators Are Away from School in the CNMI	3-7
5. Reasons for Leaving Teaching in the CNMI	3-8
6. Reasons for Leaving School Administration in the CNMI	3-9
7. MBI Subscale Mean Scores for CNMI Teachers and School Administrators Compared to the Norm Sample	3-9
8. Cut-Off Scores for MBI Subscale Categories	3-10

List of Figures

1. Personal accomplishment among teachers in the CNMI 3-10
2. Emotional exhaustion among teachers in the CNMI 3-10
3. Depersonalization among teachers in the CNMI 3-10
4. Personal accomplishment among school administrators in the CNMI 3-11
5. Emotional exhaustion among school administrators in the CNMI 3-11
6. Depersonalization among school administrators in the CNMI 3-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Jean Olopai, Research Information and Training Officer, Commonwealth of the Northern Mariana Islands (CNMI) Public School System, for her guidance and leadership in carrying out this research in the CNMI. Her efforts, along with those of the CNMI local R&D support team—Roy Fua, Josepha Teregeyo, Thomas Walter, Linda Anastacio, Peter Le'au, and Chas Algaier—made this study possible.

PREL R&D Cadre Members, 1996-1998

Fauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities

where no substitute teacher pool is available, students' educational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in research conducted in American schools. However, similar research is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate

Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Of particular interest to the Commonwealth of the Northern Mariana Islands (CNMI) is determining why there have been high turnover rates among recruited teachers, and uncovering the extent and factors affecting educator burnout and absenteeism. Approximately 23 percent of CNMI's teaching staff leaves each year. The CNMI Public School System (PSS) spends more than \$.5 million on recruitment annually, with 60 percent of the new teachers coming from the U.S. Mainland. Attrition in the CNMI is a very costly matter.

This study was designed to identify risk factors affecting educators in the CNMI and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism – such as child care, transportation difficulties, illness, and cultural demands – tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition – such as low salaries, poor benefits, and work overload – are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout – such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform

(Farber & Ascher, 1992) – are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for

example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training

programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In the CNMI, 441 teacher surveys were distributed, and 332 completed surveys were returned, resulting in a 75 percent response rate. Twenty-nine school administrator surveys were distributed, and 20 completed surveys were returned, resulting in a 69 percent response rate.

Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from the CNMI

Demographic Characteristics		Number	Percentage
Gender	Female	181	54.5
	Male	125	37.7
	No Response	26	7.8
	TOTAL	332	100.0
Ethnicity	Black American	5	1.5
	Carolinian	1	0.3
	Caucasian	154	46.4
	Chamorro	42	12.7
	Filipino	38	11.4
	FSM	10	3.0
	Palauan	21	6.3
	Samoan	8	2.4
	Mixed	13	3.9
	Other	12	3.6
	No Response	28	8.4
	TOTAL	332	100.0
Age	20 to 29	74	22.3
	30 to 39	103	31.0
	40 to 49	71	21.4
	50+	66	19.9
	No Response	18	5.4
	TOTAL	332	100.0
Marital Status	Never Married	105	31.6
	Married	161	48.5
	Separated	6	1.8
	Divorced	29	8.7
	Widowed	5	1.5
	No Response	26	7.8
	TOTAL	332	100.0
Education	HS Graduate	4	1.2
	Associate Degree	8	2.4
	Bachelor's Degree	203	61.1
	Master's Degree	79	23.8
	Advanced Degree	0	0.0
	Other	14	4.2
	No Response	24	7.2
	TOTAL	332	100.0
Experience	1 - 4 Years	116	34.9
	5 - 10 Years	98	29.5
	11 - 14 Years	28	8.4
	15 - 20 Years	33	9.9
	20+ Years	43	13.0
	No Response	14	4.2
	TOTAL	332	100.0
Salary	< 25,000	21	6.3
	25,000-29,999	52	15.7
	30,000-34,999	84	25.3
	35,000-39,999	37	11.1
	40,000-44,999	53	16.0
	45,000+	30	9.0
	No Response	55	16.6
	TOTAL	332	100.0

* refers to the Federated States of Micronesia: Chuuk, Kosrae, Pohnpei, and Yap States

The majority of teachers are married Caucasian females, between the ages of 30 to 49 years, with a bachelor's degree (61.1%) and one to ten years of teaching experience.

Table 2
Characteristics of RAPSTA School
Administrator Sample from the CNMI

Demographic Characteristics		Number	Percentage
Gender	Female	12	60.0
	Male	7	35.0
	No Response	1	5.0
	TOTAL	20	100.0
Ethnicity	Carolinian	1	5.0
	Caucasian	3	15.0
	Chamorro	10	50.0
	Filipino	2	10.0
	Mixed	1	5.0
	Other	2	10.0
	No Response	1	5.0
	TOTAL	20	100.0
Age	20 to 29	0	0.0
	30 to 39	5	25.0
	40 to 49	11	55.0
	50+	4	20.0
	No response	0	0.0
	TOTAL	20	100.0
Marital Status	Never Married	0	0.0
	Married	16	80.0
	Separated	1	5.0
	Divorced	2	10.0
	Widowed	1	5.0
	No Response	0	0.0
	TOTAL	20	100.0
Education	HS Graduate	0	0.0
	Associate Degree	0	0.0
	Bachelor's Degree	8	40.0
	Master's Degree	11	55.0
	Other	1	5.0
	No Response	0	0.0
	TOTAL	20	100.0
Experience	1 - 4 Years	0	0.0
	5 - 10 Years	1	5.0
	11 - 14 Years	2	10.0
	15 - 20 Years	8	40.0
	20+ Years	9	45.0
	No Response	0	0.0
	TOTAL	20	100.0
Salary	30,000-34,999	2	10.0
	35,000-39,999	3	15.0
	40,000-44,999	12	60.0
	45,000+	3	15.0
	No Response	0	0.0
	TOTAL	20	100.0

Most school administrators are married Chamorro females between the ages of 40 to 49 years, with a master's degree (55.0%), and more than 15 years of experience.

Sampling

The CNMI chose to have all classroom teachers and school administrators across its 14 schools included in this study. Due to easy school access, surveying all classroom teachers and school administrators did not present a problem.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the state-

ment, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI-Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI-Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition litera-

ture. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

An important part of these procedures was the administration of the survey instruments. In the CNMI, each school's classroom teachers met with the local R&D support team members who distributed the survey, waited for it to be completed, collected responses, and placed the surveys in a large envelope that was provided. The above procedure was followed at all schools, with the exception of three schools served by one team member. At these three schools, the team member distributed the teacher survey to all staff, not just the classroom teachers. Total staff at these schools included regular classroom teachers, teacher aides, school aides, and cultural informants. For school administrators, the support team distributed surveys during a scheduled administrators' meeting. Surveys were personally delivered to those principals who were not at the administrators' meeting.

The data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys and time for PREL staff to follow up on the status of returned surveys. Surveys were collected after being completed by each school's teachers and administrators. The local support team collected the completed surveys, then forwarded them to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in the CNMI. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in the CNMI sample were away from work, on average, for a total of 6.87 days. School administrators in the sample were away from work, on average, for a total of 13.65 days. Table 3 provides reasons why teachers were away from work and frequency of absence. Table 4 provides reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away from School in the CNMI

Rank	Reason	Average # of Days Away
1	Personal illness	2.26
2	Vacation	1.44
3	Meetings and workshops	0.86
4	Funerals	0.66
5	Other	0.38
6	Family member sick	0.34
7	Maternity leave	0.17
8	Training leave	0.12
8	Administrative leave	0.12
9	Stress	0.09
10	Storm, heavy rain, flood, etc.	0.07
10	Family responsibilities	0.07
11	Working conditions	0.05
11	Weddings	0.05
11	Educational leave	0.05
12	Child care	0.04
13	Paternity leave	0.02
13	Relationship with supervisors	0.02
13	Relationship with co-workers	0.02
14	Jury duty	0.01
14	Community responsibilities	0.01
14	Church activities	0.01
14	Birthdays	0.01
15	Transportation problem	0.00
15	Suspension	0.00
15	Military training	0.00
15	Lack of instructional materials	0.00
TOTAL		6.87

In the CNMI, personal illness was the leading cause of teacher absence from school, with 2.26 days away. The next highest reason was vacation, with an average of 1.44 days; followed by meetings and workshops, with an average of .86 days.

Table 4
Reasons Why School Administrators Are Away from School in the CNMI

Rank	Reason	Average # of Days Away
1	Meetings and workshops	7.55
2	Training leave	1.65
3	Personal illness	1.10
4	Administrative leave	1.00
5	Funerals	0.90
6	Other	0.45
7	Family responsibilities	0.40
8	Vacation	0.20
9	Family member sick	0.15
10	Community responsibilities	0.10
11	Stress	0.05
11	Storm, heavy rain, flood, etc.	0.05
11	Birthdays	0.05
12	Working conditions	0.00
12	Weddings	0.00
12	Transportation problem	0.00
12	Suspension	0.00
12	Relationship with supervisors	0.00
12	Relationship with co-workers	0.00
12	Paternity leave	0.00
12	Military training	0.00
12	Maternity leave	0.00
12	Lack of instructional materials	0.00
12	Jury duty	0.00
12	Educational leave	0.00
12	Church activities	0.00
12	Child care	0.00
TOTAL		13.65

CNMI school administrators were most frequently away from school due to meetings and workshops, with an average of 7.55 days. This was followed by training leave, with an average of 1.65 days, and personal illness, with an average of 1.10 days.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance

of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In the CNMI, 20.48 percent (N=68) of all teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

Poor working conditions, no support from school administration, and no support from central office were ranked as the top three reasons for leaving teaching in the CNMI, both by teachers who were planning to leave and by those who were not.

A statistical test (χ^2) was performed to find

Table 5
Reasons for Leaving Teaching in the CNMI

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	65.6	3	54.8	2
no support from school administration	67.2	1	66.5	1
no support from central office	66.2	2	66.5	1
too much stress *	61.5	4	45.4	3
poor relationships with parents	20.6	14	24.3	13
students' bad attitudes **	48.4	7	30.6	10
my lack of control over school policies	50.8	6	43.4	4
poor benefits	29.0	12	27.4	12
personal health problems **	14.3	15	40.2	6
too many disagreements about how to teach *	25.8	13	14.8	14
not enough school materials and supplies **	58.5	5	38.4	8
low salaries	41.5	9	38.2	9
too many responsibilities *	44.6	8	28.0	11
pressure from the community	11.1	16	13.6	16
retirement	32.3	10	41.8	5
promotion	31.8	11	39.8	7
poor relationship with other teachers	7.8	17	13.9	15

* $p < .05$

** $p < .01$

out whether the response patterns of Potential Leavers and Non-Leavers are different for each possible reason for leaving teaching. Potential Leavers are more likely to leave for the following

reasons: too much stress, students' bad attitudes, too many disagreements about how to teach, not enough materials and supplies, and too many responsibilities. It was also found that Potential Leavers are less likely than Non-Leavers to agree that they might leave due to personal health problems. More than 70 percent of the teachers in this study are under the age of 50; therefore, they might not consider personal health problems a plausible reason to leave teaching.

In the CNMI, 50 percent (N=10) of the school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave for leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

In the CNMI, the top reason for leaving school administration is retirement. This reason was

ranked first by school administrators who were planning to leave, as well as by those who were not. In addition, both Potential Leavers and Non-Leavers had similar rankings for many of the other reasons. A statistical test (Fisher Exact Test) was performed to find out whether the response patterns of Potential Leavers and Non-Leavers are different for each possible reason for

leaving school administration. Following Cochran (1954), the Fisher Exact Test was used because of the small sample size (N=20). Potential Leavers were found to be less likely to leave because of the

following reasons: no support from school staff, pressure from the community, poor relationship with teachers, and poor relationship with staff. Other reasons underlie the desire to leave school administration.

Table 6
**Reasons for Leaving School Administration in the CNMI:
Comparison of Potential Leavers with Non-Leavers**

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	25.0	7	40.0	7
no support from school staff *	0.0	9	60.0	5
no support from central office administration	50.0	4	88.9	2
too much stress	50.0	4	50.0	6
poor relationships with parents	12.5	8	30.0	8
students' bad attitudes	25.0	7	0.0	9
my lack of control over school policies	37.5	6	30.0	8
poor benefits	57.1	3	60.0	5
personal health problems	37.5	6	80.0	3
too many disagreements about how to run my school	25.0	7	50.0	6
not enough school materials and supplies	50.0	4	40.0	7
low salaries	87.5	2	70.0	4
too many responsibilities	50.0	4	40.0	7
pressure from the community *	0.0	9	40.0	7
retirement	100.0	1	90.0	1
promotion	37.5	6	60.0	5
poor relationship with teachers *	0.0	9	40.0	7
poor relationship with staff *	0.0	9	40.0	7
political reasons	44.4	5	40.0	7

* $p < .10$

The relationship between stress, burnout, and reported desire to leave education was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A high degree of burnout is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A medium degree of burnout is reflected in moderate scores on the three subscales.
3. A low degree of burnout is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high

scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of mean scores for all teacher and school administrator respondents, with scores from the norm sample of K-12 teachers. These scores indicate that CNMI teachers and school administrators have a higher sense of personal accomplishment than the norm sample. In addition, they are not as emotionally exhausted and do not feel as depersonalized as those in the norm sample. Therefore, in the CNMI, the majority of edu-

cators do not appear to experience occupational burnout.

Table 7
**MBI Subscale Mean Scores for CNMI Teachers
and School Administrators Compared to the
Norm Sample**

MBI Subscale	Sample Size	Mean Score
Personal Accomplishment (PA)		
CNMI Teachers	332	38.5
CNMI School Administrators	20	39.7
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
CNMI Teachers	332	20.9
CNMI School Administrators	20	18.5
Norm Sample	4,163	21.3
Depersonalization (DP)		
CNMI Teachers	332	5.4
CNMI School Administrators	20	5.1
Norm Sample	4,163	11.0

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into High, Moderate, and Low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high lack of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. For both teachers and school administrators, the patterns are the same. Those who may leave have a lower sense of personal accomplishment, are more emotionally exhausted, and feel depersonalized at work. Thus, Potential Leavers appear to experience occupational burnout.

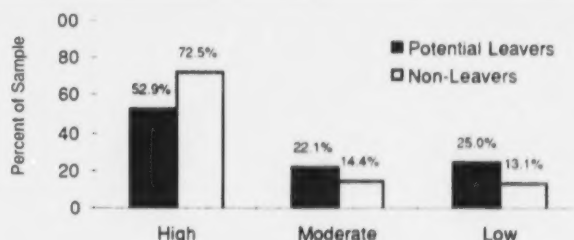


Figure 1. Personal accomplishment among teachers in the CNMI

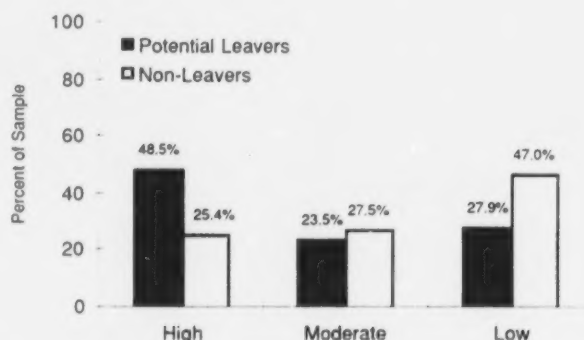


Figure 2. Emotional exhaustion among teachers in the CNMI

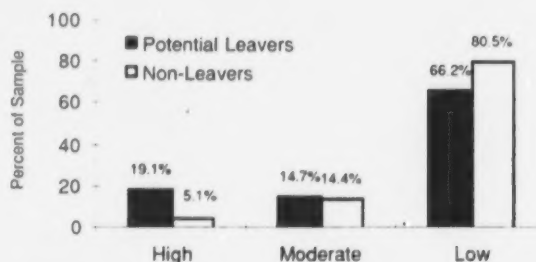


Figure 3. Depersonalization among teachers in the CNMI

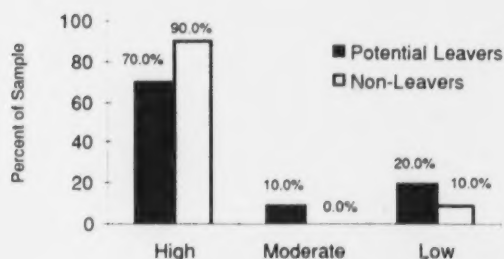


Figure 4. Personal accomplishment among school administrators in the CNMI

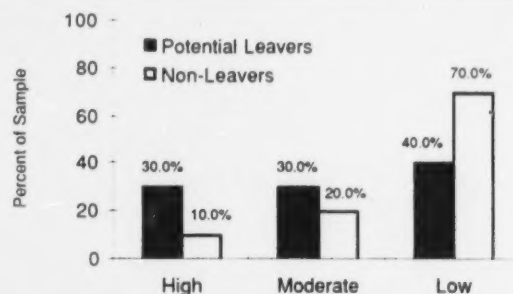


Figure 5. Emotional exhaustion among school administrators in the CNMI

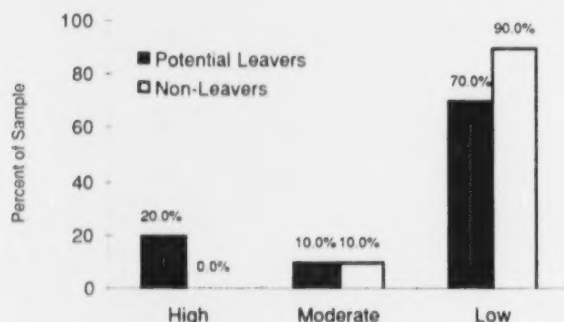


Figure 6. Depersonalization among school administrators in the CNMI

IV. Discussion

Absenteeism

Absenteeism among teachers and school administrators in the CNMI does not appear to be a problem. For example, the average number of days away from school for teachers (6.87) is among the lowest in the entities. Reasons for absences are those one would expect: personal illness, vacation, meetings and workshops, and funerals. These are factors associated with absenteeism that tend to be of immediate concern to teachers (Scott & Wimbush, 1991).

The top reasons why school administrators spend time away from school are meetings and training. Attending meetings and workshops is a part of the professional routine for school administrators, and it is not uncommon in the CNMI

PSS for school administrators to be called away from their schools to attend meetings and workshops that may last for several days.

Attrition

The top reasons for leaving, given by CNMI teachers who may leave within the next two years, include: too much stress, students' bad attitudes, disagreements about how to teach, not enough school materials and supplies, and too many responsibilities. Because many of the teachers in the PSS are from the U.S. Mainland, they may be uncomfortable with or unaware of cultural norms and practices in the CNMI. This potential culture clash might lead to certain behaviors, interactions, and conditions being perceived in a negative light,

while individuals from indigenous cultures find them acceptable. Cultural differences can lead to stress and disagreements over how to teach.

For school administrators, the top reason for leaving—retirement—is cited as number one by both Potential Leavers and Non-Leavers. More than 50 percent of the principals in the CNMI are nearing retirement, due to either years of service or years of age. Therefore, both Potential Leavers and Non-Leavers are likely to cite retirement as a reason for leaving the public school system.

Burnout

In the CNMI, teachers and school administrators, in general, experience less burnout than their Mainland counterparts. They exhibit a higher sense of personal accomplishment, are less emo-

tionally exhausted, and experience lesser degrees of depersonalization than the norm sample. However, those who might leave within the next two years are experiencing more burnout than those who plan to stay. This may be due in part to stress resulting from "students' bad attitudes," a significant reason cited by teachers for leaving (Table 5), and a stress/burnout factor that is associated with student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994). These teachers and school administrators (Potential Leavers) exhibit a lower sense of personal accomplishment, are more emotionally exhausted, and feel a stronger sense of depersonalization than their non-leaving counterparts. Thus, in the CNMI, high teacher turnover may be due, in part, to occupational burnout.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of its results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members

of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been trans-

posed so that the boxes were on the left.

2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents might leave and reasons that might cause them to leave, perhaps asking whether or not they were going to leave and why would have provided more definitive information.
3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a

respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in the CNMI. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

Across the region, the CNMI has the highest average number of days that school administrators are away from school because of meetings and workshops. They are away from school, on average, for almost 14 days per year, with more than half of these absences due to meetings and workshops. Although attending meetings and workshops is an unavoidable part of an educator's professional life, the frequency of school administrators' attendance at meetings and workshops should be critically assessed. Perhaps meetings could be facilitated by including a set agenda sent out ahead of time, so that school administrators come to the meetings with all the necessary materials. All meetings should be well planned and conducted in the interest of saving time.

Recommendations Regarding Findings on Attrition

1. The schools in the CNMI reflect the commonwealth's multi-ethnic composition, which is partly a result of immigration policies. Indigenous populations (those of Chamorro and Carolinian ancestry) make

up 73 percent of the student population, with an additional 12 percent from Micronesian entities and 13 percent from Asian countries. Teachers, however, are predominantly Caucasian (46%). Limited awareness and knowledge of the cultures and inhabitants in the CNMI creates stress for teachers, and this might be a contributing factor in the entity's high teacher-turnover rate. For recently arrived teachers, an in-depth orientation to the islands' cultures, people, and practices should be made available as part of the induction process. This might help to alleviate some of the initial apprehension, anxiety, and shock that many new teachers experience upon their arrival in the CNMI. The problems of misinformation and faulty perceptions among the newcomers can also be addressed at this time.

2. Priority and resources are needed to develop a larger local teacher pool that can meet the needs of students in the CNMI. A larger local teacher pool will reduce the need to recruit teachers from the U.S. Mainland, thereby saving recruitment costs.
3. To contribute to staff stability, a pro-active program that will reduce the attrition rate of teachers and administrators should be designed and implemented by CNMI Public School System (PSS). Staff stability, in turn, could contribute to better student performance and achievement.

Recommendations Regarding Findings on Stress/Burnout

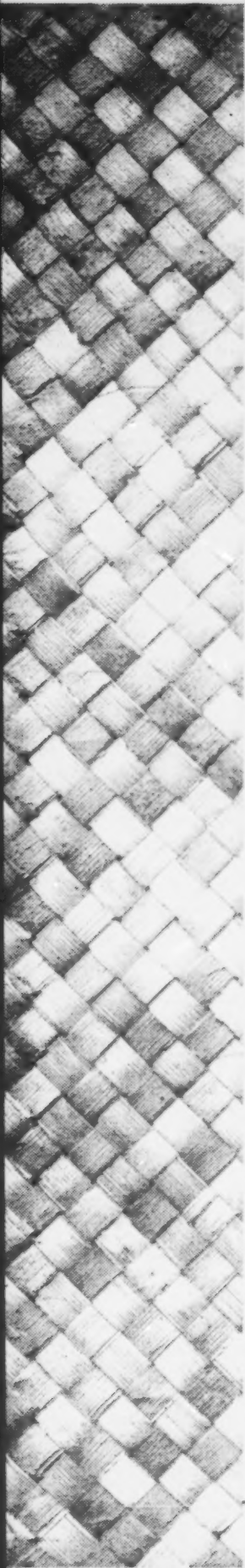
1. Practices to help reduce stress/burnout among new teachers might include intercultural communication training that fosters cross-cultural understanding between teachers and the cultural groups they serve. Improved cross-cultural understanding might lead to less stress and burnout for teachers. In the CNMI, high teacher turnover may be due, in part, to teacher burnout.
2. A comprehensive program to reduce stress and burnout among educators in the PSS should be designed and implemented.

Such a program may contribute to improved attendance and a sense of well-being for those professionals who work most closely with students.

3. Finally, the Maslach Burnout Inventory indicated that, in general, both teachers and school administrators in the Pacific entities experience less stress than their Mainland counterparts. Perhaps the concepts of stress and burnout are different in the Pacific than on the Mainland. This possible area of research may provide insights into the psychological construct of burnout as it plays out in culturally diverse contexts.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Guam

Research and Development Cadre

September 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgements	4-iii
Preface	4-iv
I. Introduction	4-1
II. Methods	4-3
III. Findings	4-7
IV. Discussion	4-11
V. Limitations	4-12
VI. Recommendations	4-14
References	4-15

List of Tables

1. Characteristics of RAPSTA Teacher Sample from Guam	4-4
2. Characteristics of RAPSTA School Administrator Sample from Guam	4-4
3. Reasons Why Teachers Are Away from School in Guam	4-7
4. Reasons Why School Administrators Are Away from School in Guam	4-7
5. Reasons for Leaving Teaching in Guam	4-8
6. Reasons for Leaving School Administration in Guam	4-9
7. MBI Subscale Mean Scores for Guam Teachers and School Administrators Compared to the Norm Sample	4-9
8. Cut-Off Scores for MBI Subscale Categories	4-10

List of Figures

1. Personal accomplishment among teachers in Guam 4-10
2. Emotional exhaustion among teachers in Guam 4-10
3. Depersonalization among teachers in Guam 4-10
4. Personal accomplishment among school administrators in Guam 4-11
5. Emotional exhaustion among school administrators in Guam 4-11
6. Depersonalization among school administrators in Guam 4-11

Acknowledgements

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of Mr. Roland Taimanglo, Director of Education; Dr. Nerissa Bretania-Shafer, Administrator of the Division of Research, Planning, and Evaluation (RP&E); and Dr. Zenaida Napa-Natividad, Planner III, RP&E, Guam Department of Education, for their guidance and leadership in carrying out this research in Guam. Their efforts, along with those of the Guam local R&D support team—Leilani Nishimura, School Program Consultant; Principals Arlene Cruz, Bernadette Cruz, Johnny Rivera, Robert Crisostomo, Joseph Diego, Vaughn Mesa, and Edward Anderson; and vice principals, counselors, and participating teachers—made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongtung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' educational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For

various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in research conducted in American schools. However, similar research is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Of particular interest to the Guam Department of Education (DOE) was understanding what factors

influence teachers and school administrators to leave or stay in the profession. The results of the study will assist the Guam DOE in its efforts to improve communication and quality of services during its planned reorganization and conversion to site/school-based management. The study results will also be useful during the implementation of Guam's Comprehensive Education Improvement Plan (CEIP).

This study was designed to identify risk factors affecting educators in Guam and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some people in some entities. For example, a condition referred to as "Monday sickness," occurs when male teachers, especially those who are young and single, are absent from school after a week-end of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the

results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated

with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators in general, and Pacific educators in particular, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data-collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In Guam, 463 teacher surveys and 18 school administrator surveys were distributed. Three hundred and one completed teacher surveys were returned, resulting in a 65 percent response rate, and 16 school administrator surveys were completed and returned, yielding an 89 percent response rate. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from Guam

Demographic Characteristics		Number	Percentage*
Gender	Female	199	66.1
	Male	90	29.9
	No Response	12	4.0
	TOTAL	301	100.0
Ethnicity	Caucasian	76	25.2
	Chamorro	85	28.2
	Part-Chamorro	29	9.6
	Filipino	67	22.3
	Mixed	8	2.7
	Palauan	2	0.7
	Other	15	5.0
	No Response	19	6.3
	TOTAL	301	100.0
Age	20-29	84	27.9
	30-39	74	24.6
	40-49	69	22.9
	50+	70	23.3
	No Response	4	1.3
	TOTAL	301	100.0
Marital Status	Never Married	93	30.9
	Married	160	53.2
	Separated	6	2.0
	Divorced	28	9.3
	Widowed	3	1.0
	No Response	11	3.7
	TOTAL	301	100.0
Education	HS Graduate	6	2.0
	Associate Degree	9	3.0
	Bachelor's Degree	196	65.1
	Master's Degree	72	23.9
	Other	11	3.7
	No Response	7	2.3
	TOTAL	301	100.0
Experience	1 - 4 Years	105	34.9
	5 - 10 Years	61	20.3
	11 - 14 Years	33	11.0
	15 - 20 Years	37	12.3
	20+ Years	50	16.6
	No Response	15	5.0
	TOTAL	301	100.0
Salary	< 25,000	18	6.0
	25,000 - 29,999	86	28.6
	30,000 - 34,999	40	13.3
	35,000 - 39,999	71	23.6
	40,000 - 44,999	44	14.6
	45,000+	5	1.7
	No Response	37	12.3
	TOTAL	301	100.0

* Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married females of Chamorro (28.2%), Caucasian (25.2%), or Filipino (22.3%) descent, with a fairly even distribution of age from 20 to 50+ years. Most teachers hold a

bachelor's degree (65.1%) and have one to ten years of teaching experience. In addition, 23.9 percent of the teachers surveyed hold a master's degree.

Table 2
Characteristics of RAPSTA School
Administrator Sample from Guam

Demographic Characteristics		Number	Percentage*
Gender	Female	10	62.5
	Male	4	25.0
	No Response	2	12.5
	TOTAL	16	100.0
Ethnicity	Caucasian	2	12.5
	Chamorro	11	68.8
	Filipino	1	6.3
	Other	1	6.3
	No Response	1	6.3
	TOTAL	16	100.0
Age	35-39	4	25.0
	40-44	1	6.3
	45-49	7	43.8
	50+	3	18.8
	No Response	1	6.3
	TOTAL	16	100.0
Marital Status	Never Married	3	18.8
	Married	12	75.0
	Separated	0	0.0
	Divorced	0	0.0
	Widowed	0	0.0
	No Response	1	6.3
	TOTAL	16	100.0
Education	HS Graduate	0	0.0
	Associate Degree	0	0.0
	Bachelor's Degree	0	0.0
	Master's Degree	14	87.5
	Other	2	12.5
	No Response	0	0.0
	TOTAL	16	100.0
Experience	1 - 4 Years	0	0.0
	5 - 10 Years	3	18.8
	11 - 14 Years	3	18.8
	15 - 20 Years	3	18.8
	20+ Years	7	43.8
	No Response	0	0.0
	TOTAL	16	100.0
Salary	< 45,000	1	6.3
	45,000 - 49,999	8	50.0
	50,000 - 54,999	5	31.3
	55,000+	1	6.3
	No Response	1	6.3
	TOTAL	16	100.0

* Percentages might not sum to exactly 100 due to rounding.

The majority of the sixteen school administrators are married Chamorro (68.8%) females over the age of 45. Most hold a master's degree (87.5%) and have more than 15 years of experience.

Sampling

In order to ensure a high rate of response, the R&D Cadre surveyed teachers and school administrators from representatively sampled schools. This process is referred to as cluster sampling, because clusters or groups of participants are sampled. To ensure that the sample adequately represented the entire Guam teaching population, several different schools were selected. Teachers, school principals, and vice principals from two public elementary schools, two public middle schools, and two public high schools in both urban and rural areas of Guam were chosen for the study.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how

respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986)

were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years;" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of their serious responses on the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

Selected sample schools in Guam were informed about the RAPSTA study. They were also informed that Department of Education (DOE) specialists and PREL staff would be visiting their schools to conduct a survey. An important part of the study was the administration of the survey instrument. During May 1997, a PREL representative met with two Guam DOE personnel who were trained to administer the RAPSTA surveys. The Division of Research, Planning, and Evaluation (RP&E), with the approval of the Director of Education, selected six schools: two schools from each level (elementary, middle, and high school). Of these six schools, three represented rural districts and three represented urban districts.

The data were collected from April 1997 to June 1997, allowing adequate time for personnel to complete the surveys and for PREL staff to follow up on the status of returned surveys. A PREL staff member and a Guam DOE representative met with the faculty of the three rural schools and administered the surveys. The locally trained staff member later administered the surveys to the urban district schools. For teachers and administrators who were not present, surveys were given to the principals for distribution. Completed forms were submitted to RP&E in large sealed envelopes, then forwarded to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in Guam. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in the Guam sample were away from work for an average of 8.18 days. School administrators in the sample were away from work for an average of 8.45 days. Table 3 shows reasons why teachers were away from work and the frequency of absence. Table 4 shows reasons why school administrators were away from work and the frequency of absence.

Table 3
Reasons Why Teachers Are Away from School
in Guam

Rank	Reason	Average # of Days Away
1	Personal illness	2.41
2	Family member sick	1.05
3	Military training	0.51
4	Other	0.47
5	Maternity leave	0.46
5	Educational leave	0.44
7	Administrative leave	0.43
8	Funerals	0.41
9	Family responsibilities	0.34
10	Child care	0.32
11	Storm, heavy rain, flood, etc.	0.30
12	Meetings and workshops	0.24
13	Vacation	0.21
14	Stress	0.11
15	Working conditions	0.09
16	Jury duty	0.08
17	Training leave	0.06
18	Relationship with supervisors	0.05
19	Transportation problem	0.04
19	Birthdays	0.04
20	Paternity leave	0.03
20	Church activities	0.03
20	Community responsibilities	0.03
20	Weddings	0.03
21	Lack of instructional materials	0.00
21	Relationship with co-workers	0.00
21	Suspension	0.00
TOTAL		8.18

In Guam, personal illness was the leading cause of teachers being away from school, with an average of 2.41 days away. The next highest reason was sickness in the family, with an average of 1.05 days; fol-

lowed by military training, with an average of 0.51 days.

Table 4
Reasons Why School Administrators Are Away
from School in Guam

Rank	Reason	Average # of Days Away
1	Family member sick	2.44
2	Personal illness	1.81
3	Meetings and workshops	1.63
4	Vacation	0.75
5	Family responsibilities	0.50
5	Funerals	0.50
6	Paternity leave	0.31
7	Administrative leave	0.19
8	Child care	0.13
8	Stress	0.13
9	Community responsibilities	0.06
10	Birthdays	0.00
10	Church activities	0.00
10	Educational leave	0.00
10	Jury duty	0.00
10	Lack of instructional materials	0.00
10	Maternity leave	0.00
10	Military training	0.00
10	Other	0.00
10	Relationship with co-workers	0.00
10	Relationship with supervisors	0.00
10	Storm, heavy rain, flood, etc.	0.00
10	Suspension	0.00
10	Training leave	0.00
10	Transportation problem	0.00
10	Weddings	0.00
10	Working conditions	0.00
TOTAL		8.45

Guam school administrators were most frequently away from school due to sickness in the family, with an average of 2.44 days. This was followed by personal illness, with an average of 1.81 days, and meetings and workshops, with an average of 1.63 days.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DIS-AGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In Guam, 19.27 percent (N=58) of the surveyed teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement: "I might leave teaching within the next two years." Table 5 ranks the reasons that teachers gave for leaving teaching and compares Potential Leavers with Non-Leavers.

Poor working conditions, no support from school administration, and no support from central office were ranked among the top reasons for leaving teaching in Guam, both by teachers who were planning to leave and by those who were not.

less likely than Non-Leavers to leave for these reasons.

In Guam, 75 percent (N=12) of the school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave for leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

There were many reasons why Potential Leavers might leave school administration (see Table 6). Too much stress, personal health problems, low salaries,

Table 5
Reasons for Leaving Teaching in Guam

If I quit teaching, it would be because of . . .	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	62.3	4	58.1	3
no support from school administration	63.6	3	63.6	1
no support from central office	69.8	1	63.3	2
too much stress	50.9	7	55.3	5
poor relationship with parents	41.5	10	29.6	11
students' bad attitudes **	61.1	6	35.5	9
my lack of control over school policies	34.2	12	25.6	12
poor benefits *	10.0	16	25.2	13
personal health problems	41.5	10	55.2	6
too many disagreements about how to teach *	35.2	11	21.2	15
not enough materials and supplies **	61.8	5	35.0	10
low salaries *	66.0	2	50.2	8
too many responsibilities **	50.0	8	24.8	14
pressure from community	23.1	14	18.2	16
retirement	49.1	9	56.2	4
promotion *	34.0	13	51.0	7
poor relationship with other teachers	15.4	15	15.7	17

* $p \leq .05$

** $p \leq .01$

A statistical test (Chi²) was performed to examine differences in the response patterns of Potential Leavers and Non-Leavers for each possible reason for leaving teaching. Potential Leavers are more likely to leave for the following reasons: students' bad attitudes, disagreements about how to teach, not enough materials and supplies, low salaries, and too many responsibilities. It was also found that while Potential Leavers vary significantly from Non-Leavers in their selection of poor benefits and promotion as reasons for leaving, Potential Leavers are

and retirement were the top reasons given. For each possible reason for leaving school administration, a statistical test was performed to determine whether the response patterns of Potential Leavers and Non-Leavers differ. Following Cochran (1954), the Fisher Exact Test was used because of the small sample size (N=16). Potential Leavers were found to be more likely to leave because of stress and personal health problems and less likely to leave because of promotion.

Table 6
Reasons for Leaving School Administration in Guam

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	30.0	7	75.0	2
no support from school staff	20.0	8	50.0	3
no support from central office administration	60.0	3	75.0	2
too much stress *	80.0	1	25.0	5
poor relationship with parents	20.0	8	25.0	5
students' bad attitudes	10.0	9	25.0	5
my lack of control over school policies	10.0	9	50.0	3
poor benefits	20.0	8	50.0	3
personal health problems *	80.0	1	25.0	5
too many disagreements about how to run my school	40.0	6	33.3	4
not enough materials and supplies	50.0	5	0.0	6
low salaries	63.6	2	100.0	1
too many responsibilities	54.6	4	50.0	3
pressure from the community	10.0	9	25.0	5
retirement	63.6	2	75.0	2
promotion *	40.0	6	100.0	1
poor relationship with teachers	0.0	10	25.0	5
poor relationship with staff	10.0	9	25.0	5
political reasons	40.0	6	75.0	2

* $p \leq .10$

Comparison of Potential Leavers with Non-Leavers

The relationship between stress, burnout, and reported desire to leave the education field was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.
3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of mean scores for all teacher and school administrator respondents, with scores from the norm sample of K-12 teachers. These scores indicate that Guam teachers and school administrators experience a higher sense of personal accomplishment than the norm sample. They are not as emotionally exhausted and do not feel as depersonalized as those in the norm. Therefore, in the Guam sample, the majority of educators do not appear to experience occupational burnout.

Table 7
MBI Subscale Mean Scores for Guam Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size	Mean Score
Personal Accomplishment (PA)		
Guam Teachers	301	38.7
Guam School Administrators	16	39.0
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Guam Teachers	301	17.0
Guam School Administrators	16	18.4
Norm Sample	4,163	21.3
Depersonalization (DP)		
Guam Teachers	301	4.7
Guam School Administrators	16	6.1
Norm Sample	4,163	11.0

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into High, Moderate, and Low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high lack of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. Teachers who may leave are more likely to feel less personal accomplishment than Non-Leavers. In addition, they are more emotionally exhausted and feel more depersonalized. Among school administrators, Potential Leavers are slightly more emotionally exhausted and depersonalized. However, there appear to be only small differences between Potential Leavers and Non-Leavers in terms of burnout. For school administrators in Guam, occupational burnout does not appear to be a problem.

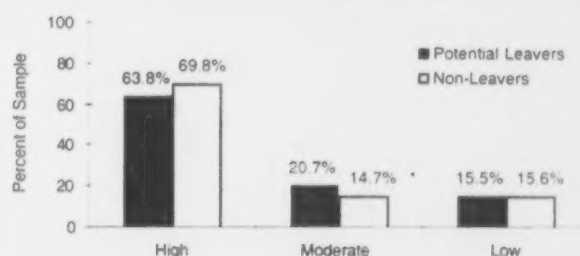


Figure 1. Personal accomplishment among teachers in Guam

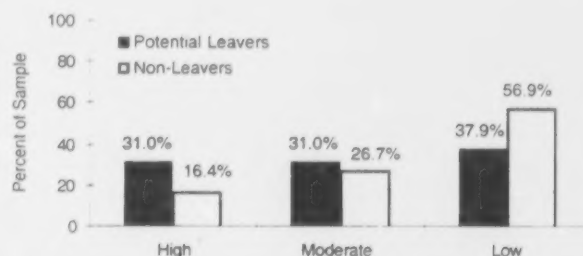


Figure 2. Emotional exhaustion among teachers in Guam

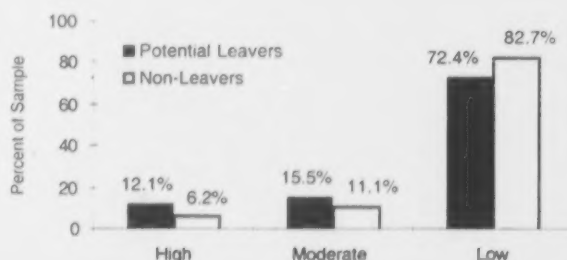


Figure 3. Depersonalization among teachers in Guam

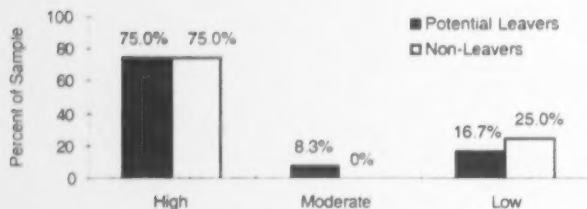


Figure 4. Personal accomplishment among school administrators in Guam

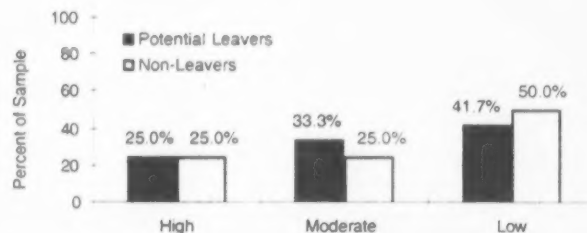


Figure 5. Emotional exhaustion among school administrators in Guam

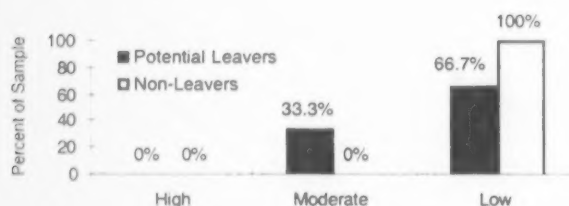


Figure 6. Depersonalization among school administrators in Guam

IV. Discussion

Absenteeism

Absenteeism among teachers and school administrators in Guam does not appear to be a problem. For example, teachers in Guam were away from work, on average, for a total of 8.18 days. School administrators were away from work, on average, for a total of 8.45 days. These numbers are among the lowest in all the entities. Two of the top five reasons for absences among teachers and school administrators are those one would expect: personal illness and family member sickness. These factors associated with absenteeism tend to be of immediate concern to teachers (Scott & Wimbush, 1991). Military training and meetings and workshops are professional requirements.

Attrition

In Guam, 19.27 percent (N=58) of all teachers surveyed agreed that they might leave the teaching profession within the next two years. Their top reasons for leaving include: no support from central office, low salaries, no support from school administration, and poor working conditions. As the majority of Guam teachers surveyed have ten or less years of teaching experience and are in the 20 to 39 age range, Potential Leavers may be younger and looking for options outside the teaching profession. The concerns cited above may seem to be reasonable enough for them to leave the teaching profession.

Seventy-five percent (N=12) of the school administrators sampled agreed that they might leave educational administration within the next two years. They gave multiple reasons for leaving. More than 50 percent of the Guam administrators sampled

are nearing retirement, either in years of service or age; therefore, it follows that both Potential Leavers and Non-Leavers cited retirement as a reason for leaving the public school system. For those who are planning to leave, personal health problems and stress were cited as the top reasons for leaving. For those approaching retirement, personal health problems seem to be a logical corollary; for others, stress associated with the perception of low salaries, lack of support from central office administration, and too many responsibilities may factor into the decision to leave school administration.

Burnout

In Guam, teachers and school administrators, in general, experience less burnout than their U.S. Mainland counterparts. They exhibit a higher sense of personal accomplishment, are less emotionally exhausted, and experience lesser degrees of deper-

sonalization. In general, Guam's educators are engaged in their work. However, teachers who may leave within the next two years are experiencing more burnout than those who plan to stay.

Although school administrators who may leave have equally high levels of personal accomplishment, emotional exhaustion, and depersonalization as those who plan to stay, Potential Leavers do show slightly higher degrees of emotional exhaustion and depersonalization. The scores on all three subscales show that occupational burnout among school administrators does not appear to be a problem; however, for the 75 percent of school administrators who plan to leave, their higher degrees of emotional exhaustion and depersonalization may result from the reasons they gave for leaving—too much stress, lack of support from central office administration, and too many responsibilities.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of its results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;

- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers'

meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.
2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents *might* leave and reasons that *might* cause them to leave,

perhaps asking whether or not they were going to leave and *why* would have provided more definitive information.

3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The findings of this study provide important information concerning the reasons why teachers and administrators are absent from school and insight to conditions that potentially influence teachers' and administrators' decisions to leave their positions within Guam public schools. However, in light of the limitations in making conclusions about the larger teacher and administrator population in Guam, it is recommended that the study be replicated for the total teacher and administrator population. It is also recommended that the survey be conducted during the first semester instead of the last week of a given school year.

Teachers who indicated that they might leave their profession cited the following reasons for leaving: no support from central office, low salaries, no support from school administration, and poor working conditions. Given the need to retain experienced teachers, it is recommended that the Guam Director of Education, in collaboration with selected principals and teachers, engage in dialogue concerning those reasons and explore ways to resolve the concerns. For example, leaders might assume that supplies and materials are being provided based on the prescribed list in the Board Union Contract. Teachers, on the other hand, may be expecting more than what has been stated in the agreement. The reasons cited by teachers also imply staff development needs in the areas of classroom/time management, team building, and strategies in strengthening school-family partnerships.

The results revealed that as many as 75 percent of administrators who responded to the survey might leave their profession within the next two years. Personal health problems and stress were cited as the top reasons for leaving. This again warrants further investigation into the working conditions of principals; the role that stress plays, and ways to improve the conditions. More importantly, the high proportion of potential leavers among administrators warrants immediate attention to the development of a comprehensive plan for attracting more educators to school leadership positions and retaining those who are currently employed as principals and assistant principals.

Guam is currently in the process of developing an implementation plan for Public Law 24-142. That law reorganizes the Guam Department of Education public schools into four independent school districts. Each school district will be governed by an elected Board of Education and managed by a Superintendent hired by the District's Board of Education. The functions and authority of the State Department of Education, currently known as Central Office, will be downsized: duties will primarily consist of administering federal funds and monitoring school district progress towards implementing state standards. In light of these efforts, it is imperative that the results of this study be shared with the elected boards of education and superintendents of the respective school districts.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Hawai'i

Research and Development Cadre

November 1999



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	.5-iii
Preface	.5-iv
I. Introduction	.5-1
II. Methods	.5-3
III. Findings	.5-7
IV. Discussion	.5-11
V. Limitations	.5-13
VI. Recommendations	.5-14
References	.5-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from Hawai'i	.5-4
2. Characteristics of RAPSTA School Administrator Sample from Hawai'i	.5-4
3. Reasons Why Teachers Are Away from School in Hawai'i	.5-7
4. Reasons Why School Administrators Are Away from School in Hawai'i	.5-7
5. Reasons for Leaving Teaching in Hawai'i	.5-8
6. Reasons for Leaving School Administration in Hawai'i	.5-9
7. MBI Subscale Mean Scores for Hawai'i Teachers and School Administrators Compared to the Norm Sample	.5-10
8. Cut-Off Scores for MBI Subscale Categories	.5-10

List of Figures

1. Personal accomplishment among teachers in Hawai'i	.5-10
2. Emotional exhaustion among teachers in Hawai'i	.5-10
3. Depersonalization among teachers in Hawai'i	.5-10
4. Personal accomplishment among school administrators in Hawai'i	.5-11
5. Emotional exhaustion among school administrators in Hawai'i	.5-11
6. Depersonalization among school administrators in Hawai'i	.5-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Uehara, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Michael Heim, Hawai'i Department of Education, for his guidance and leadership in carrying out this research in Hawai'i. His efforts, along with those of the Hawai'i local R&D support team—Carolyn Hee, Don Nugent, and Marsha Kaitoku—made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' educational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For

various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in the research literature. However, research on this topic is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Issues of particular interest to Hawai'i were high rates of attrition and the relationship between attri-

tion, stress, and burnout among teachers and school administrators. The Hawai'i Department of Education also expressed a specific concern about attrition and stress among its Special Education teachers.

This study was designed to identify risk factors affecting educators in Hawai'i and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to

school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some people in some entities. For example, a condition referred to as "Monday sickness," occurs when male teachers, especially those who are young and single, are absent from school after a week-end of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training pro-

grams, as well as the high costs associated with traveling to institutions "of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will

also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In Hawai'i, 1,252 teacher surveys and 256 school administrator surveys were distributed. Five-hundred and forty-nine completed teacher surveys were returned, resulting in a 43.8 percent response rate, and 127 school administrator surveys were completed and returned, yielding a 49.6 percent response rate.

A random sample of 428 teachers was selected from the teacher respondents to reflect the 1996-1997 distribution of elementary, secondary, and Special Education teachers in the Hawai'i public schools. Tables 1 and 2 summarize demographic characteristics of this teacher sample and all of the original school administrator respondents.

Table 1
Characteristics of RAPSTA
Teacher Sample from Hawai'i

Demographic Characteristics		Number	Percentage*
Gender	Female	333	77.8
	Male	82	19.2
	No Response	13	3.0
	TOTAL	428	100.0
Ethnicity	Chinese	19	4.4
	Filipino	20	4.7
	Hawaiian	8	1.9
	Part Hawaiian	36	8.4
	Japanese	155	36.2
	Caucasian	103	24.1
	Mixed	44	10.3
	Other	34	7.9
	No Response	9	2.1
	TOTAL	428	100.0
Age	20-29	81	18.9
	30-39	91	21.3
	40-49	135	31.5
	50+	117	27.3
	No Response	4	0.9
	TOTAL	428	100.0
Marital Status	Never Married	112	26.2
	Married	258	60.3
	Separated	5	1.2
	Divorced	31	7.2
	Widowed	8	1.9
	No Response	14	3.3
	TOTAL	428	100.0
Education	HS Graduate	0	0.0
	Associate Degree	2	0.5
	Bachelor's Degree	189	44.2
	Master's Degree	118	27.6
	Other	112	26.2
	No Response	7	1.6
	TOTAL	428	100.0
Experience	1 - 4 Years	100	23.4
	5 - 10 Years	116	27.1
	11 - 14 Years	54	12.6
	15 - 20 Years	42	9.8
	20+ Years	111	25.9
	No Response	5	1.2
	TOTAL	428	100.0
Salary	< 25,000	15	3.5
	25,000 - 29,999	112	26.2
	30,000 - 34,999	93	21.7
	35,000 - 39,999	63	14.7
	40,000 - 44,999	40	9.3
	45,000+	60	14.0
	No Response	45	10.5
	TOTAL	428	100.0

* Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married females, 40 years of age or older, of Japanese (36.2%) or Caucasian (24.1%) ethnicity, with a bachelor's (44.2%) degree and 10 years or less of teaching experience.

Table 2
Characteristics of RAPSTA School
Administrator Sample from Hawai'i

Demographic Characteristics		Number	Percentage*
Gender	Female	84	66.1
	Male	38	29.9
	No Response	5	3.9
	TOTAL	127	100.0
Ethnicity	Chinese	11	8.7
	Filipino	5	3.9
	Hawaiian	5	3.9
	Part Hawaiian	11	8.7
	Japanese	56	44.1
	Caucasian	17	13.4
	Mixed	7	5.5
	Other	7	5.5
	No Response	8	6.3
	TOTAL	127	100.0
Age	>35	3	2.4
	35-39	3	2.4
	40-44	7	5.5
	45-49	39	30.7
	50-54	52	40.9
	55-59	19	15.0
	60-64	3	2.4
	65+	1	0.8
	No Response	0	0.0
	TOTAL	127	100.0
Marital Status	Never Married	21	16.5
	Married	85	66.9
	Separated	3	2.4
	Divorced	15	11.8
	Widowed	2	1.6
	No Response	1	0.8
	TOTAL	127	100.0
Education	HS Graduate	0	0.0
	Associate Degree	0	0.0
	Bachelor's Degree	8	6.3
	Master's Degree	104	81.9
	Other	15	11.8
	No Response	0	0.0
	TOTAL	127	100.0
Experience	>10 Years	5	3.9
	10 - 15 Years	7	5.5
	16 - 20 Years	14	11.0
	21 - 25 Years	38	29.9
	26 - 30 Years	31	24.4
	31 - 35 Years	22	17.3
	36 - 40 Years	6	4.7
	41+ Years	4	3.1
	No Response	0	0.0
	TOTAL	127	100.0
Salary	< 45,000	1	0.8
	45,000 - 49,999	12	9.4
	50,000 - 54,999	33	26.0
	55,000 - 59,000	27	21.3
	60,000 - 64,999	28	22.0
	65,000 - 69,999	14	11.0
	70,000+	6	4.7
	No Response	6	4.7
	TOTAL	127	100.0

* Percentages might not sum to exactly 100 due to rounding.

Most school administrators are married Japanese (44.1%) or Caucasian (13.4%) females between 45 and 59 years of age, with a master's degree (81.9%) and more than 20 years of experience.

Sampling

The original sample from which this study's subsample was selected was generated by the Hawai'i Department of Education (DOE). A computer-generated random sample of all DOE teachers included 20 percent of all Special Education teachers, 10 percent of elementary teachers, and 10 percent of secondary teachers. The Hawai'i DOE personnel office was originally interested in data on teacher absenteeism, attrition, stress, and burnout among its Special Education teacher population, as compared to the general education teacher population. Therefore, a deliberate over-selection of Special Education teachers was included in the sample. Results of comparisons between regular and Special Education teachers on absenteeism, attrition, stress and burnout, and recommendations for improvement were delivered to the Hawai'i Department of Education's Assistant Superintendent for Personnel during Spring 1997.

For the purpose of this study, a subsample of teachers—reflecting the 1996-1997 distribution of elementary, secondary, and Special Education teachers in Hawai'i public schools—was randomly computer-selected from the larger original sample. Thus, results in this report reflect responses from 428 subjects—87 percent regular education and 13 percent Special Education teachers.

All school administrators in Hawai'i public schools were sent questionnaires.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school adminis-

trator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual-occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- *Low Personal Accomplishment* results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- *Emotional Exhaustion* "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they

once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).

- *Depersonalization* results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs.

Respondents were asked to rate each of 20 plus statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature or their perceived importance by educators in the Pacific region. Four additional reasons, relevant to the Hawai'i context were included in the Hawai'i questionnaire, at the request of the Assistant Superintendent for Personnel. These reasons were: class size; too much paper work; not enough time; and threat of law suits.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. PREL R&D staff met with Hawai'i DOE personnel to discuss modifying the questionnaire administered to the other nine Pacific entities in order to include items related to specific Hawai'i concerns. Four additional reasons for leaving were included in the Hawai'i RAPSTA teacher and administrator questionnaires.

During May 1997, questionnaires were sent to the school addresses of all school principals and the teachers included in the sample, with an accompanying letter signed by both the Hawai'i Department of Education Superintendent and the PREL Executive Director. This letter explained the purpose of the study, gave assurances of anonymity, and described the procedure for returning questionnaires via an enclosed stamped envelope. Completed forms were submitted to PREL for data entry and analysis.

III. Findings

This section of the report features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in Hawai'i. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in Hawai'i were away from work, on average, for a total of 8.96 days. School administrators were away from work, on average, for a total of 24.91 days. Table 3 provides data on reasons why teachers were away from work and frequency of absence. Table 4 provides data on reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away from School in Hawai'i

Rank	Reason	Average # of Days Away
1	Personal illness	2.30
2	Meetings and workshops	2.19
3	Maternity leave	1.21
4	Other	0.72
5	Family member sick	0.57
6	Family responsibilities	0.29
7	Funerals	0.28
8	Educational leave	0.20
8	Vacation	0.20
9	Stress	0.18
10	Child care	0.15
11	Training leave	0.14
12	Jury duty	0.11
13	Administrative leave	0.07
14	Military training	0.06
14	Weddings	0.06
14	Working conditions	0.06
15	Community responsibilities	0.04
15	Paternity leave	0.04
16	Relationship with co-workers	0.03
17	Storm, heavy rain, flood, etc.	0.02
18	Birthdays	0.01
18	Church activities	0.01
18	Relationship with supervisors	0.01
18	Transportation problem	0.01
19	Lack of instructional materials	0.00
19	Suspension	0.00
TOTAL		8.96

In Hawai'i, personal illness was the leading cause of teacher absence from school, with an average of 2.30 days away. The next highest reason was meetings and workshops, with an average of 2.19 days.

Table 4
Reasons Why School Administrators Are Away from School in Hawai'i

Rank	Reason	Average # of Days Away
1	Meetings and workshops	15.22
2	Personal illness	4.09
3	Funerals	2.27
4	Administrative leave	0.79
5	Family member sick	0.63
6	Other	0.55
7	Vacation	0.38
8	Training leave	0.19
9	Community responsibilities	0.16
10	Educational leave	0.13
11	Jury duty	0.12
11	Military training	0.12
12	Family responsibilities	0.06
12	Paternity leave	0.06
13	Working conditions	0.04
14	Child care	0.03
14	Relationship with supervisors	0.03
15	Weddings	0.02
16	Birthdays	0.01
16	Transportation problem	0.01
17	Church activities	0.00
17	Lack of instructional materials	0.00
17	Maternity leave	0.00
17	Relationship with co-workers	0.00
17	Storm, heavy rain, flood, etc.	0.00
17	Stress	0.00
17	Suspension	0.00
TOTAL		24.91

Hawai'i school administrators were most frequently away from school due to meetings and workshops, averaging 15.22 days. This was followed by personal illness, with an average of 4.09 days; and funerals, with an average of 2.27 days.

Reasons for Attrition in the Education Profession

Respondents rated more than 20 reasons for leaving teaching or administration on a four-point Likert-type scale, from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and

"agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In Hawai'i, 24.1 percent (n=103) of the surveyed teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

are more likely to leave for the following reasons: too much stress, personal health problems, too many responsibilities, too much paper work, and not enough time. They are less likely than Non-Leavers to leave for reasons related to retirement or promotion.

In Hawai'i, 31.5 percent (n=40) of the surveyed school administrators agreed that they might leave educational administration within the next two years. Table 6 ranks the reasons school administrators gave for leaving the school administration field,

Table 5
Reasons for Leaving Teaching in Hawai'i

If I quit teaching, it would be because of . . .	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	68.4	6	59.5	8
no support from school administration	58.6	10	61.3	6
no support from central office	60.4	9	60.1	7
too much stress *	82.2	1	72.0	1
poor relationship with parents	29.5	17	32.3	19
students' bad attitudes	66.7	7	56.7	10
my lack of control over school policies	54.2	11	50.8	13
poor benefits	34.1	15	37.9	17
personal health problems **	27.1	20	52.4	12
too many disagreements about how to teach	40.8	14	33.2	18
not enough materials and supplies	50.5	12	41.0	16
low salaries	73.7	5	69.4	2
too many responsibilities *	76.0	4	63.1	3
pressure from community	28.1	19	29.6	20
retirement **	41.4	13	61.7	5
promotion **	28.3	18	44.2	14
poor relationship with other teachers	19.4	21	17.5	21
class size	65.0	8	58.8	9
too much paper work **	76.8	3	56.1	11
not enough time **	79.2	2	62.0	4
threat of lawsuits	33.3	16	42.0	15

* $p < .05$

** $p < .01$

For both Potential Leavers and Non-Leavers, the number one reason for leaving teaching was too much stress. Also included in the top five by both groups were low salaries, too many responsibilities, and not enough time.

For each possible reason for leaving teaching, a statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different. Potential Leavers (teachers)

and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

For both Potential Leavers and Non-Leavers, the top reasons for leaving administration were too much stress, too many responsibilities, and retirement.

Table 6
Reasons for Leaving Administration in Hawai'i

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	60.5	4	46.1	6
no support from school staff **	13.5	14	43.2	9
no support from central office admin	44.7	9	52.4	5
too much stress	78.4	2	65.0	4
poor relationship with parents	16.2	13	27.2	13
students' bad attitudes	13.5	14	13.8	16
my lack of control over school policies	48.6	7	45.0	8
poor benefits	25.0	11	21.0	14
personal health problems	51.4	6	66.3	3
too many disagreements about how to run my school	32.4	10	29.6	12
not enough materials and supplies	18.9	12	13.8	16
low salaries	59.5	5	45.1	7
too many responsibilities *	89.2	1	68.8	2
pressure from the community	25.0	11	35.4	10
retirement	76.3	3	76.8	1
promotion *	46.0	8	66.3	3
poor relationship with teachers *	10.8	15	32.1	11
poor relationship with staff **	5.4	17	29.6	12
political reasons	7.9	16	19.5	15

* $p < .05$

** $p < .01$

There are many reasons why Potential Leavers might leave school administration (see rankings in Table 6). For each possible reason for leaving, a statistical test (χ^2) was performed to determine if response patterns of Potential Leavers and Non-Leavers are different. Compared to their Non-Leaving peers, Potential Leavers (among school administrators) are more likely to leave their profession because of lack of support from school staff, too many responsibilities, and poor relationships with staff. They are less likely than Non-Leavers to cite promotion or poor relationships with teachers as reasons for leaving.

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave education was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.

2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.
3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of scores from the norm sample with mean scores for all Hawai'i teacher and school administrator respondents. Both groups express a higher sense of personal accomplishment than the norm sample. In addition, they are somewhat more emotionally exhausted, with teachers more exhausted than administrators. Both groups report less feelings of depersonalization than the norm group. On the contrary, they report a higher degree of engagement with work than educators included in the norm sample.

Table 7
MBI Subscale Scores for Hawai'i Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size*	Mean Score
Personal Accomplishment (PA)		
Hawaii Teachers	414	38.4
Hawaii School Administrators	124	37.8
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Hawaii Teachers	417	23.5
Hawaii School Administrators	125	21.9
Norm Sample	4,163	21.3
Depersonalization (DP)		
Hawaii Teachers	419	6.4
Hawaii School Administrators	126	7.3
Norm Sample	4,163	11.0

*Sample sizes vary due to non-responses.

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified as High, Moderate, or Low. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high lack of personal accomplishment. We found this to be confusing, and thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. For both teachers and school administrators, the patterns are the same. Those who may leave are less likely to feel a high sense of personal accomplishment, are more emo-

tionally exhausted, and feel more depersonalized than those who plan to stay. Both teachers and school administrators who plan to leave appear to experience more occupational burnout than their non-leaving peers.

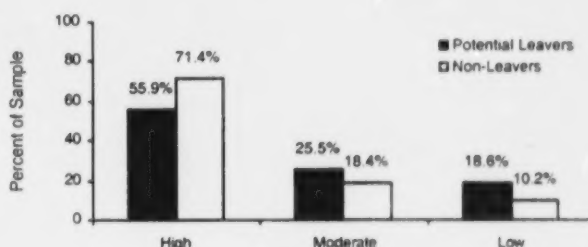


Figure 1. Personal accomplishment among teachers in Hawai'i

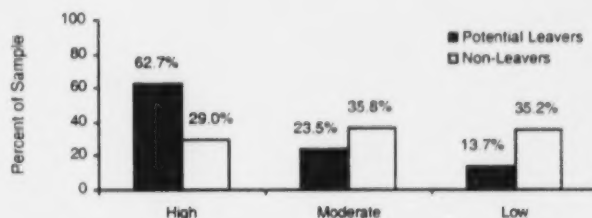


Figure 2. Emotional exhaustion among teachers in Hawai'i

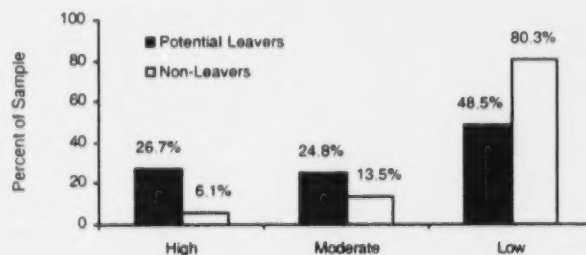


Figure 3. Depersonalization among teachers in Hawai'i

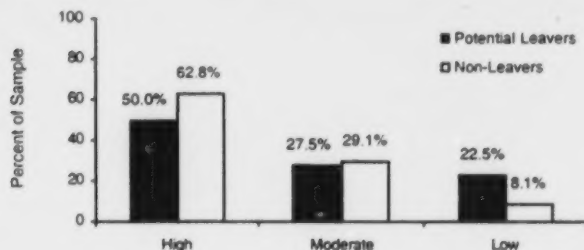


Figure 4. Personal accomplishment among school administrators in Hawai'i

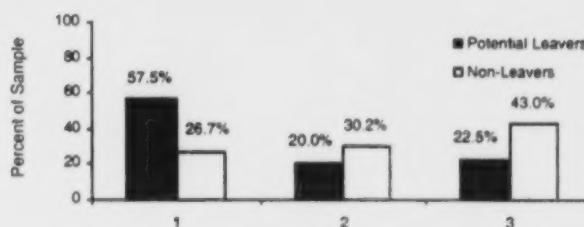


Figure 5. Emotional exhaustion among school administrators in Hawai'i

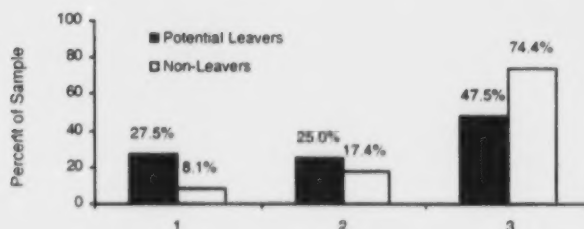


Figure 6. Depersonalization among school administrators in Hawai'i

IV. Discussion

Absenteeism

It appears that absenteeism among teachers in Hawai'i is not a problem. Results of the RAPSTA studies indicate that, across all entities in the Pacific region, the average number of days away from school during school year 1996-97 was 11, with a range from 5 to 22. Hawai'i's average for days absent was 8.96, lower than the regional average, and slightly higher than the U.S. national teacher average of 7 sick and personal leave days per year (Freeman & Grant, 1987).

Personal illness and meetings and workshops were cited as the leading causes that keep teachers in Hawai'i away from school. Immediate obligations or concerns, such as illness, are cited in the research literature as reasons for absenteeism (Scott & Wimbush, 1991). The allotted two days per year to attend meetings and workshops seems quite reasonable; one of the days could have been for the yearly Teachers' Institute. Additional days for pro-

fessional development during the school year are usual.

School administrators, however, appear to be away from school for a significant number of days. Their yearly average number of days absent was 24.91, with meetings and workshops responsible for more than 60 percent of this time away from school. School administrators also reported more time away (4.09 days) due to personal illness than did teachers (2.30 days).

Attrition

More than 24 percent of surveyed Hawai'i teachers reported that they might leave their profession within two years. Potential Leavers are significantly more likely than Non-Leavers to cite too much stress, personal health problems, too many responsibilities, too much paperwork, and not enough time as reasons for leaving their jobs.

Problems associated with teacher attrition are common throughout the United States, with one out of every five full-time teachers leaving the teaching profession to pursue a career outside the field of education (National Center for Education Statistics, 1998). In Hawai'i, the issue of attrition is even more pronounced. Geographical isolation hinders recruitment, and limited resources restrict institutions of higher education from preparing sufficient numbers of teachers for schools in Hawai'i. Unfortunately, teachers recruited from the continental U.S. leave jobs in Hawai'i at a higher rate than those who are trained locally. "If you train them here, they will stay" (Kua, 1999). Further analysis of the Hawai'i RAPSTA teacher data indicate that U.S. Mainland teachers who are recruited to teach in Hawai'i are more likely to report more days away from school and higher levels of workplace stress than their Pacific-trained peers (Brown and Uehara, 1999).

Given the challenges of geography and the limited availability of locally prepared teachers in Hawai'i, retaining trained teachers is of critical importance. Preventing teacher attrition is an educational and economic necessity.

Approximately 32 percent of Hawai'i school administrators surveyed reported that they might leave their profession within two years. Many reasons for leaving were cited, but Potential Leavers are more likely to leave due lack of support and poor relationships with schools staff as well as too many responsibilities.

Recruitment of school administrators in Hawai'i is as challenging as teacher recruitment: Current DOE Board of Education policy states that only educators with Hawai'i teaching experience and who have been through a Hawai'i-based administrators' training program can be recruited for school administration positions. Thus, the depleted teacher ranks are further diminished when teachers leave their profession to fill the needs created when school administrators leave their positions.

Burnout

Teachers in Hawai'i, in general, experience less burnout than their counterparts on the U.S. Mainland. They exhibit a higher sense of personal accomplishment than both school administrators and the norm sample. In addition, they have low levels of depersonalization. They do, however, exhibit higher

degrees of emotional exhaustion. This is borne out in the results of reasons for leaving: among all teachers sampled, too much stress was cited as the primary reason that might cause teachers to leave their job.

Stress is one of the main reasons why teachers leave their jobs; unfortunately, our schools often cannot find sufficient replacements and therefore face severe teacher shortages. Teachers who reported that they might leave teaching also reported higher stress and teacher burnout levels than their non-leaving peers. This is especially true among teachers from the U.S. Mainland who are working far away from home. These potential leavers displayed more emotional exhaustion, greater feelings of depersonalization, and less personal accomplishment in their jobs. The extremely high attrition rate among Hawai'i's teachers might be related to this occupational burnout.

These findings are corroborated by research of Kyriacou and Sutcliffe (1979) who acknowledge that the intention to leave teaching is associated with teacher stress. Unfortunately, high teacher turnover has a negative effect on student achievement (Walberg, 1974).

In the multicultural Pacific region, contact between cultures might contribute to teacher stress. For teachers who move into unfamiliar cultures, acculturative stress may cause lowered mental health (e.g., confusion, anxiety, depression) and feelings of alienation; those who feel marginalized can become highly stressed (Berry, 1990). Teachers from very different cultures may neither understand nor appreciate the cultural differences of the communities in which they are placed. "Even experienced teachers embark[ing] on assignments in new cities...can be sorely tested. The so-called reality shock exacts a terrible toll on teacher morale, school district recruitment, and most important, student achievement" (Recruiting New Teachers, Inc., 1999). Since novice teachers are often reluctant to ask for help, they may be afraid to let anyone know that they are having problems in the classroom. This can then lead to additional stress, which can eventually lead to high absenteeism and attrition. Those who are recruited and relocated thousands of miles away from family and friends may have inadequate social networks to provide social support, which is critical for worker health.

On the other hand, school administrators in

Hawai'i, in general, do not exhibit any aspects of burnout. Like teachers, they display higher levels of personal accomplishment and feel less depersonalized than their U.S. Mainland counterparts.

Those school administrators who plan to leave within the next two years, however, experience more

burnout than those who plan to stay. These Potential Leavers experience a lower sense of personal accomplishment, are more emotionally exhausted, and feel depersonalized. They appear to experience all aspects of burnout.

V. Limitations

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.

2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents *might* leave and reasons that *might* cause them to leave, perhaps asking whether or not they were *going to* leave and *why* would have provided more definitive information.
3. Survey directions could have clearly told respondents to exclude official school vacations from responses to questions regarding the number of days away.
4. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and consequently honesty, in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more

likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, stan-

dardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in Hawai'i. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparison of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

Absenteeism among teachers in Hawai'i does not appear to be a problem. Teachers were away from work for an average of 8.96 days, lower than the regional average, and slightly higher than that of the U.S.

Absenteeism among school administrators, on the other hand, could be cause for concern. Their average of approximately 25 days away from school during SY 1996-97 is more than 12 percent of their 194 on-duty days at school. Although 60 percent of their time away was due to work-related activities—attending workshops and meetings, learning skills relevant for their positions, and focusing on communication and collaboration with other school administrators—this precious time away may detract from efforts to effectively lead, assuming that the primary role of a school administrator is to be an instructional leader for the school. Current standards-based school reform initiatives, which are currently in Hawai'i's forefront, may require principals to spend more time working with school staff in aligning curriculum, instruction, and assessment with Hawai'i Content and Performance Standards.

Recommendations Regarding Findings on Attrition

Nearly one quarter of Hawai'i's surveyed teachers indicated that they might leave their profession within two years. An even greater percentage of school administrators may also leave. Recruitment difficulties due to geography and limited access to higher education opportunities in the Pacific region make the retention of teachers and school administrators a critical concern.

To contribute to staff stability, a pro-active program that will reduce the attrition rate of teachers and school administrators should be designed and implemented by the public school system. Staff stability, in turn, could contribute to better student performance and achievement.

For new teachers, among whom attrition is traditionally highest, an induction program that includes various forms of support and assistance is recommended. It should provide guidance, training, and growth opportunities as well as information about cross-cultural interaction.

In districts where induction programs already exist, provisions to guide and prepare teachers for the stresses associated with relocation and cultural adjustment should be included. Perhaps teacher induction programs should follow models of the cross-cultural communication training that is usually provided to foreign students and workers prior to emigration (Brislin, Cushner, Cherrie, & Yong, 1986). Teacher induction programs could include training activities that highlight cross-cultural awareness, such as intercultural communication, cross-cultural adjustment, culture learning, and unfamiliar socialization practices (Paige, 1990).

In addition, for teachers employed far away from home and family, opportunities for group interaction can offer much-needed assistance. A network of social groups can support teachers in coping with acculturation. These groups can be both social and professional. "Strong support systems for novice teachers can mean the difference between staying in or leaving the teaching profession entirely" (Recruiting New Teachers, Inc., 1999).

Recommendations Regarding Findings on Stress/Burnout

Although burnout is not a problem for teachers and school administrators who choose to remain in education, those teachers and school administrators who may leave within the next two years experience a lower sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized. For those who plan to leave, occupational burnout appears to be a problem. It is therefore recommended that, in order to retain these educators, the public school system develop a comprehensive program to reduce stress and burnout. This might improve the attendance and well-being of those who work most closely with students.

References

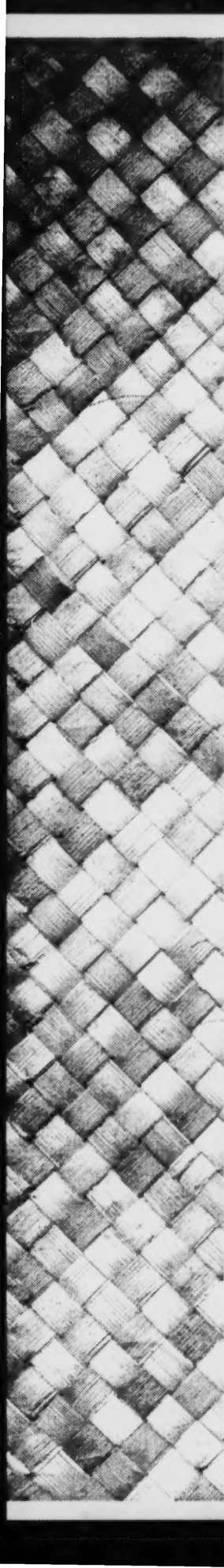
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Berry, J. W. (1990). Psychology of acculturation: Understanding individuals moving between cultures. In R. W. Brislin (Ed.), *Applied cross-cultural psychology* (pp. 232-253). Newbury Park, CA: Sage.
- Brown, Z. A., & Uehara, D. L. (1999). *Coping with teacher stress: A research synthesis for Pacific educators*. Honolulu, HI: Pacific Resources for Education and Learning.
- Brislin, R., Cushner, K., Cherrie, C., & Yong, M. (1986). *Intercultural interactions: A practical guide*. Newbury Park, CA: Sage.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A., & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B., & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://eric-web.tc.columbia.edu/digests/dig75.html> [1999, November].
- Freeman, R. R., & Grant, F. D. (1987). How we increased staff attendance by 16 percent and saved \$156,000. *American School Board Journal*, 174(2), 31.
- Hammond, O., & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H., & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Kua, C. (1999, February 4). Bills are aimed at retaining teachers. *Honolulu Star-Bulletin*, A4.
- Maslach, C., & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *The Maslach Burnout Inventory Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- National Center for Education Statistics. (1998). *Compendium: Projections of education statistics to 2008*. Washington, DC: U.S. Government Printing Office. (NCES Publication Number 065-000-01150-6).
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, Volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Paige, R. M. (1990). International students: Cross-cultural psychological perspectives. In R. W. Brislin (Ed.), *Applied cross-cultural psychology* (pp. 161-185). Newbury Park, CA: Sage.

Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.

Recruiting New Teachers, Inc. (1999). *New releases: Learning the ropes*. [Online]. Available: <http://www.mnt.org/quick/new.html> [1999, November].

Scott, K. D., & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27(4), 506-529.

Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29(2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Kosrae State, Federated States of Micronesia

Research and Development Cadre

June 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	6-iii
Preface	6-iv
I. Introduction	6-1
II. Methods	6-3
III. Findings	6-7
IV. Discussion	6-11
V. Limitations	6-12
VI. Recommendations	6-14
References	6-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from Kosrae State	6-4
2. Characteristics of RAPSTA School Administrator Sample from Kosrae State	6-4
3. Reasons Why Teachers Are Away from School in Kosrae State	6-7
4. Reasons Why School Administrators Are Away from School in Kosrae State	6-7
5. Reasons for Leaving Teaching in Kosrae State	6-8
6. Reasons for Leaving School Administration in Kosrae State	6-9
7. MBI Subscale Mean Scores for Kosrae State Teachers and School Administrators Compared to the Norm Sample	6-10
8. Cut-Off Scores for MBI Subscale Categories	6-10

List of Figures

1. Personal accomplishment among teachers in Kosrae State 6-10
2. Emotional exhaustion among teachers in Kosrae State 6-10
3. Depersonalization among teachers in Kosrae State 6-10
4. Personal accomplishment among school administrators in Kosrae State 6-11
5. Emotional exhaustion among school administrators in Kosrae State 6-11
6. Depersonalization among school administrators in Kosrae State 6-11

Acknowledgments

This cost-shared study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the project, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Winton Clarence, Testing and Evaluation Coordinator, Kosrae Department of Education, Federated States of Micronesia, for his guidance and leadership in carrying out this research in Kosrae. His efforts, along with those of Kosrae local R&D support team members—Alister Tolenoa, Leo William, Tulensru Waguk, Johnston Albert, Fletcher Tulensru, Abraham Anton, and Ned Likiaksa—made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongtung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995) sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' edu-

cational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in research conducted in American schools. However, similar research is lacking for the Pacific region. As a result, the PREL Board of directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress and burnout. Merriam-Webster's New Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Of particular interest to the Kosrae Department of Education were teacher issues raised by high school students when they responded to questions posed during a study of at-risk students (PREL, 1995). In this study, students described their worst teachers: unprepared, unable to pace or explain lessons clearly, mean, critical, shows favoritism, shouts, swears, hits students, and is often absent or tardy. These behaviors could adversely affect students' learning abilities as evidenced by test results from the Federated States of Micronesia National Standardized Test and the College of Micronesia Entrance Tests. In addition, some good teachers in the Kosrae Department of Education have left the teaching profession to work elsewhere. These factors prompted the Kosrae Department of Education to participate in this study.

The RAPSTA study was designed to identify specific risk factors affecting educators in Kosrae State and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).

- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. The following examples were obtained from a literature review as well as from interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to select people in some entities. "Monday sickness," for example, takes place when male teachers, especially those who are young and single, are absent from school after a week-end of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to

address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators in general, and Pacific educators in particular, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In Kosrae State, 155 teacher surveys were distributed, and 144 completed surveys were returned, resulting in a 93 percent response rate. All 12 of Kosrae's school administrators completed the survey, yielding a 100 percent response rate.

Participants represented the total population of Kosrae State's school staff. Tables 1 and 2 summarize the subjects' demographic characteristics.

Table 1
Characteristics of RAPSTA Teacher Sample
from Kosrae State

Demographic Characteristics		Number	Percentage
Gender	Female	39	27.1
	Male	93	64.6
	No Response	12	8.3
	TOTAL	144	100.0
Ethnicity	Caucasian	1	0.7
	Filipino	1	0.7
	Japanese	2	1.4
	Kosraean	127	88.2
	Mixed	2	1.4
	Others	3	2.1
	No Response	8	5.6
	TOTAL	144	100.0
Age	20 to 29	35	24.3
	30 to 39	42	29.2
	40 to 49	47	32.6
	50+	14	9.7
	No Response	6	4.2
	TOTAL	144	100.0
Marital Status	Never Married	32	22.2
	Married	102	70.8
	Separated	1	0.7
	Divorced	0	0.0
	Widowed	0	0.0
	No Response	9	6.3
	TOTAL	144	100.0
Education	HS Graduate	22	15.3
	Associate Degree	85	59.0
	Bachelor's Degree	24	16.7
	Master's Degree	2	1.4
	Other	1	0.7
	No Response	10	6.9
	TOTAL	144	100.0
Experience	1 - 4 Years	42	29.2
	5 - 10 Years	27	18.8
	11 - 14 Years	18	12.5
	15 - 20 Years	31	21.5
	20+ Years	15	10.4
	No Response	11	7.6
	TOTAL	144	100.0
Salary	<4,000	7	4.9
	4,000-4,999	29	20.1
	5,000-5,999	31	21.5
	6,000-6,999	18	12.5
	7,000-7,999	24	16.7
	8,000+	25	17.4
	No Response	10	6.9
	TOTAL	144	100.0

The majority of teachers are married Kosraean males, between the ages of 30 and 49, with an associate degree (59%) and one to ten years of teaching experience.

Table 2
Characteristics of RAPSTA School
Administrator Sample from Kosrae State

Demographic Characteristics		Number	Percentage
Gender	Female	0	0.0
	Male	8	66.7
	No Response	4	33.3
	TOTAL	12	100.0
Ethnicity	Kosraean	12	100.0
	No Response	0	0.0
	TOTAL	12	100.0
Age	40 to 44	1	8.3
	45 to 49	3	25.0
	50 to 54	5	41.7
	55 to 59	3	25.0
	No Response	0	0.0
	TOTAL	12	100.0
Marital Status	Never Married	0	0.0
	Married	12	100.0
	Separated	0	0.0
	Divorced	0	0.0
	Widowed	0	0.0
	No Response	0	0.0
	TOTAL	12	100.0
Education	HS Graduate	3	25.0
	Associate Degree	8	66.7
	Bachelor's Degree	1	8.3
	Master's Degree	0	0.0
	Advanced Degree	0	0.0
	No Response	0	0.0
	TOTAL	12	100.0
Experience	1 - 4 Years	2	16.7
	5 - 10 Years	1	8.3
	11 - 14 Years	0	0.0
	15 - 20 Years	1	8.3
	20+ Years	8	66.7
	No Response	0	0.0
	TOTAL	12	100.0
Salary	9,000-9,999	5	41.7
	10,000-10,999	6	50.0
	11,000+	1	8.3
	No Response	0	0.0
	TOTAL	12	100.0

Most school administrators are married Kosraean males between the ages of 45 and 59, with an associate degree (66.7%) and more than twenty years of experience.

Sampling

Kosrae State education officials decided to include all classroom teachers and school administrators in this study.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people"

(Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educator's Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Resources Survey (Maslach &

Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years;" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis

of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

An important part of the sampling procedure was the administration of the survey instruments. In Kosrae State, teachers assembled in their respective schools, received instructions in Kosraean and English, and filled out the surveys in group settings. The completed forms were collected on site. For the school administrator surveys, principals assembled in one room at the central office and the instrument was read aloud to them, item by item. Again, instruction was given in both Kosraean and English, and the completed forms were collected on site.

The data were collected from April through June 1997, allowing adequate time for personnel to complete the surveys and for PREL staff to follow up on the status of returned surveys. The local support team collected the completed surveys, then forwarded them to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in Kosrae State. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in Kosrae State were away from work for an average of 5.41 days. School administrators were away from work for an average of 22.66 days. Table 3 shows reasons why teachers were away from work and the frequency of absence. Table 4 shows reasons why school administrators were away from work and the frequency of absence.

Table 3
Reasons Why Teachers Are Away from School in Kosrae State

Rank	Reason	Average # of Days Away
1	Funerals	1.20
2	Personal illness	1.19
3	Maternity leave	0.67
4	Family member sick	0.48
5	Meetings and workshops	0.40
6	Administrative leave	0.24
7	Suspension	0.14
8	Community responsibilities	0.12
8	Educational leave	0.12
9	Vacation	0.11
10	Family responsibilities	0.10
10	Child care	0.10
10	Storm, heavy rain, flood, etc.	0.10
11	Other	0.09
12	Lack of instructional materials	0.08
13	Stress	0.05
13	Transportation problem	0.05
14	Church activities	0.04
14	Relationship with supervisors	0.04
14	Training leave	0.04
15	Jury duty	0.03
16	Working conditions	0.02
17	Birthdays	0.00
17	Military training	0.00
17	Paternity leave	0.00
17	Relationship with co-workers	0.00
17	Weddings	0.00
TOTAL		5.41

In Kosrae State, attending funerals was the leading cause of teacher absence from school, with an average of 1.20 days away. The next most frequently cited reason was personal illness, with an average of 1.19 days; followed by maternity leave, with an average of 0.67 days; family member sickness, with an average of 0.48 days; and meetings and workshops, with an average of 0.40 days.

Table 4
Reasons Why School Administrators Are Away from School in Kosrae State

Rank	Reason	Average # of Days Away
1	Meetings and workshops	6.00
2	Training leave	5.83
3	Personal illness	3.33
4	Educational leave	2.58
5	Funerals	1.75
6	Administrative leave	0.83
7	Family responsibilities	0.75
8	Vacation	0.67
9	Community responsibilities	0.42
10	Family member sick	0.25
11	Child care	0.17
12	Church activities	0.08
13	Birthdays	0.00
13	Jury duty	0.00
13	Lack of instructional materials	0.00
13	Maternity leave	0.00
13	Military training	0.00
13	Other	0.00
13	Paternity leave	0.00
13	Relationship with co-workers	0.00
13	Relationship with supervisors	0.00
13	Storm, heavy rain, flood, etc.	0.00
13	Stress	0.00
13	Suspension	0.00
13	Transportation problem	0.00
13	Weddings	0.00
13	Working conditions	0.00
TOTAL		22.66

The leading reasons for absence among Kosrae State school administrators were education-related functions. Both meetings and workshops, and training leave accounted for an average of six days each, while personal illness averaged 3.33 days. Educational leave averaged 2.58 days, and funerals averaged 1.75 days.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving the teaching or school administration fields on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In Kosrae State, 27.78 percent (N=40) of all teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, and compares Potential Leavers with Non-Leavers.

Poor working conditions, no support from school administration, and low salaries were among the top reasons for leaving teaching in Kosrae State. These reasons were ranked among the top five by teachers who were planning to leave as well as by those who were not.

Table 5
Reasons for Leaving Teaching in Kosrae State

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	71.1	4	78.7	1
no support from school administration	77.5	2	76.9	2
no support from central office	66.7	6	76.3	3
too much stress	69.2	5	55.8	8
poor relationships with parents	38.5	11	32.0	14
students' bad attitudes	38.5	11	37.3	13
my lack of control over school policies	23.1	15	29.0	15
poor benefits	36.8	13	45.7	9
personal health problems *	35.9	14	60.3	7
too many disagreements about how to teach	37.5	12	38.2	12
not enough school materials and supplies	74.4	3	60.8	6
low salaries	80.0	1	65.8	5
too many responsibilities **	48.7	8	24.7	16
pressure from the community	40.0	10	41.1	11
retirement **	43.6	9	70.7	4
promotion	56.4	7	44.0	10
poor relationship with other teachers	18.0	16	23.7	17

*p ≤ .05

**p ≤ .01

A statistical test (Chi²) was performed to find out whether the response patterns of Potential Leavers and Non-Leavers are different for each possible reason for leaving teaching. Potential Leavers are more likely to leave because of too many responsibilities. It was also found that Potential Leavers are less likely than Non-Leavers to cite retirement and personal health problems as reasons for leaving. More than 50 percent of the teachers in this study are under the age of 40; therefore, they might not consider personal health problems and retirement as plausible reasons to leave teaching within the next two years.

In Kosrae State, 33.33 percent (N=4) of the school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the potential reasons these administrators gave for leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

There were many reasons why Potential Leavers might consider leaving school administration (see Table 6). A statistical test (Fisher Exact Test) was performed to find out whether the response patterns of Potential Leavers and Non-

Leavers are different for each possible reason for leaving school administration. Following Cochran (1954), the Fisher Exact Test was used because of the small sample size (N=12). Potential Leavers were found to be less likely than Non-Leavers to cite no support from central office administration and promotion as reasons to leave. Therefore, other reasons underlie the desire for Potential Leavers to leave school administration.

Table 6
Reasons for Leaving Administration in Kosrae State

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	20.0	3	40.0	6
no support from school staff	20.0	3	33.3	7
no support from central office administration *	40.0	2	100.0	1
too much stress	40.0	2	33.3	7
poor relationships with parents	0.0	4	20.0	8
students' bad attitudes	20.0	3	16.7	9
my lack of control over school policies	20.0	3	33.3	7
poor benefits	40.0	2	16.7	9
personal health problems	40.0	2	50.0	5
too many disagreements about how to run my school	40.0	2	0.0	10
not enough school materials and supplies	60.0	1	50.0	5
low salaries	40.0	2	83.3	2
too many responsibilities	20.0	3	16.7	9
pressure from the community	0.0	4	50.0	5
retirement	40.0	2	80.0	3
promotion *	0.0	4	60.0	4
poor relationship with teachers	20.0	3	0.0	10
poor relationship with staff	20.0	3	20.0	8
political reasons	40.0	2	16.7	9

* $p \leq .10$

Comparison of Potential Leavers with Non-Leavers

The relationship between stress, burnout, and reported desire to leave the education field was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.

3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 shows the comparison between mean scores for teacher and school administrator respondents and the norm sample. Kosrae State teachers and school administrators express a lower sense of personal accomplishment than the norm sample. Both groups also reported that they are less emotionally exhausted and do not feel as depersonalized as those in the norm sample. Therefore, in Kosrae State, a low sense of personal accomplishment, rather than emotional exhaustion and depersonalization, may contribute to occupational burnout among educators.

Table 7
MBI Subscale Scores for Kosrae State Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size	Mean Score
Personal Accomplishment (PA)		
Kosrae State Teachers	144	31.6
Kosrae State School Administrators	12	27.3
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Kosrae State Teachers	144	20.1
Kosrae State School Administrators	12	11.9
Norm Sample	4,163	21.3
Depersonalization (DP)		
Kosrae State Teachers	144	7.0
Kosrae State School Administrators	12	4.3
Norm Sample	4,163	11.0

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into high, moderate, and low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means that high scores denote a high lack of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between teacher (Figures 1-3) and school administrator (Figures 4-6) Potential Leavers and Non-Leavers on the three MBI subscales. Teachers who might leave have a slightly lower sense of personal accomplishment than those who plan to stay, and they are somewhat more emotionally exhausted than

Non-Leavers (adding the percentages in the high and moderate categories). Both groups experience low levels of depersonalization.

While school administrators in general report a low sense of personal accomplishment, those who plan to leave have an even lower sense of personal accomplishment, are more emotionally exhausted, and experience higher levels of depersonalization than Non-Leavers.

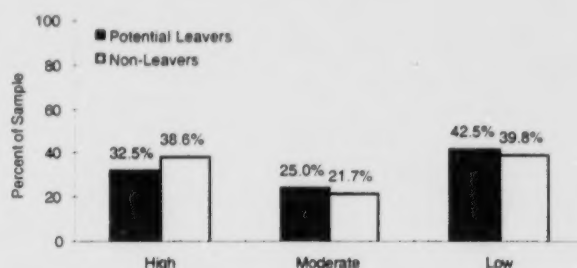


Figure 1. Personal accomplishment among teachers in Kosrae State

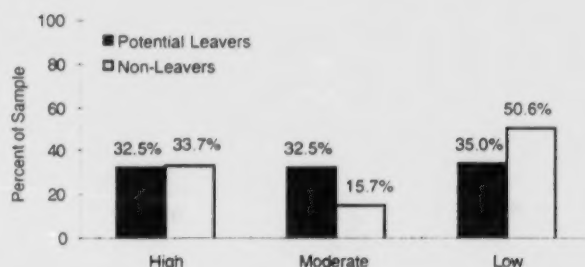


Figure 2. Emotional exhaustion among teachers in Kosrae State

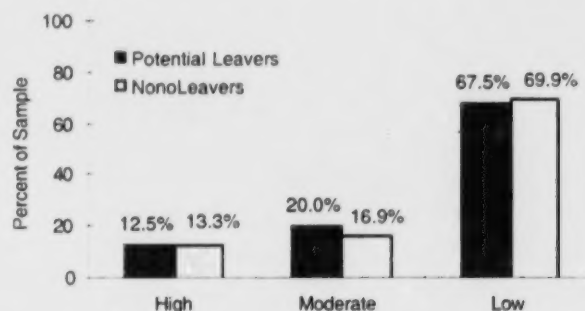


Figure 3. Depersonalization among teachers in Kosrae State

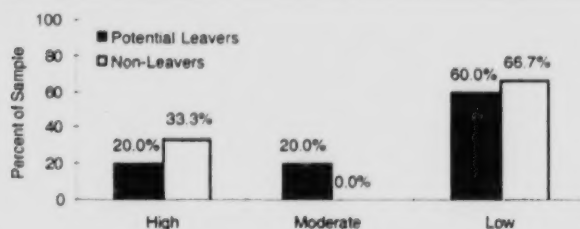


Figure 4. Personal accomplishment among school administrators in Kosrae State

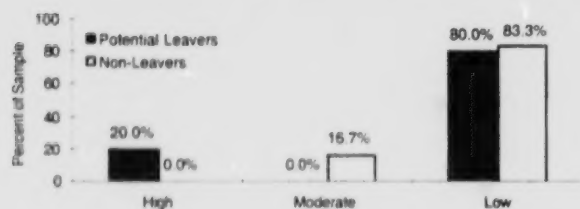


Figure 5. Emotional exhaustion among school administrators in Kosrae State

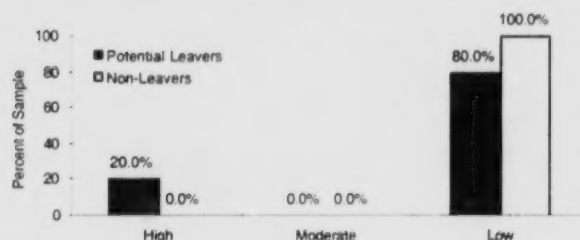


Figure 6. Depersonalization among school administrators in Kosrae State

VI. Discussion

Absenteeism

Absenteeism among teachers in Kosrae State does not appear to be a problem. For example, the average number of days away from school (5.41) is one of the lowest among the entities. Reasons for absences are those one would expect: funerals, personal illness, maternity leave, and sickness in the family. These are factors associated with absenteeism that tend to be of immediate concern to teachers (Scott & Wimbush, 1991). Funerals have always been an important event in the

Kosraean culture, and they require almost every community member's involvement. Therefore, it is not surprising that attendance at funerals is the top stated reason for absences.

The average number of days that school administrators were absent was 22.66 days—one of the highest averages among the entities. The top five reasons that school administrators cited for spending time away from school include: meetings and workshops, training leave, personal illness, educational leave, and funerals. Three of

these reasons can be considered education-related absences over which school administrators may have little or no control. Often, they are required to attend week-long meetings and workshops scheduled by the Central Office.

Attrition

Approximately 28 percent of teachers in Kosrae State report that, within the next two years, they may leave for the following reasons: low salaries, no support from school administration, not enough school materials and supplies, poor working conditions, and too much stress. These reasons for leaving are among the chronic or habitual, attrition-related factors identified by Wari (1993): low salaries, poor benefits, and work overload. Teachers in Kosrae State may feel that teaching is not a professional career; otherwise, its professional status would be reflected in higher salaries. They may feel that they are underpaid in relation to their heavy workload. In addition, teachers often mentioned that they receive no support from school administration, and that their needs and concerns are seldom addressed by appropriate personnel. Furthermore, teachers have voiced concerns over a lack of materials and supplies—a lack that may be due to reduced funding for the Kosrae State educational system as a result of the Compact of Free Association phase-out. Poor working conditions may also be a contributing factor for those wanting to leave the teaching profession. Teachers referred to the difficulties associated with small classrooms, worn-out desks, lack of textbooks, and too many classes to teach.

Cumulatively, all of these reasons may lead to a high degree of stress and, eventually, to a desire to leave teaching.

Thirty-three percent (N=4) of school administrators plan to leave within the next two years. They cite many reasons for leaving, but the small number of Potential Leavers limits interpretation of these results. All school administrators in Kosrae State are 45 years of age or older; therefore, both Potential Leavers and Non-Leavers are likely to cite retirement as a reason for leaving school administration.

Burnout

In Kosrae State, both teachers and school administrators report a lower sense of personal accomplishment than those in the norm sample, and school administrators report a significantly lower level than teachers.

Teachers who might leave the teaching profession have a slightly lower sense of personal accomplishment than those who plan to stay. They are also more emotionally exhausted than Non-Leavers. Both groups experience low levels of depersonalization. Thus, Potential Leavers may experience some aspects of occupational burnout.

Although two out of three school administrators have a low sense of personal accomplishment, those who plan to leave have a lower sense of personal accomplishment, are more emotionally exhausted, and experience higher levels of depersonalization than Non-Leavers. Thus, school administrators who plan to leave appear to be experiencing all aspects of occupational burnout.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit the accurate interpretation of results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results

from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first lan-

guage; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages

include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.
2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents might leave and reasons that might cause them to leave, perhaps asking whether or not they were going to leave and why would have provided more definitive information.
3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few

schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic

differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in Kosrae State. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition and the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

In Kosrae State, teachers were away from work an average of 5.41 days; school administrators were away from work an average of 22.66 days, one of the highest rates in the region. Reasons included meetings and workshops, and training leave, both with an average of six days each. Although attending meetings and workshops

is an unavoidable part of an educator's professional life, the frequency of school administrators' meetings, workshops, and other reasons for being away from school should be critically assessed.

Recommendations Regarding Findings on Attrition

In Kosrae State, 28 percent of teachers agreed that they might quit teaching within the next two years. Among administrators, 33 percent agreed that they might leave their jobs in the near future. Due to the limited pool of potential educators within this island community, a pro-active program that will reduce the attrition rate of teachers and administrators should be designed and implemented in the Kosrae State public school system. Staff stability, in turn, could contribute to better student performance and achievement.

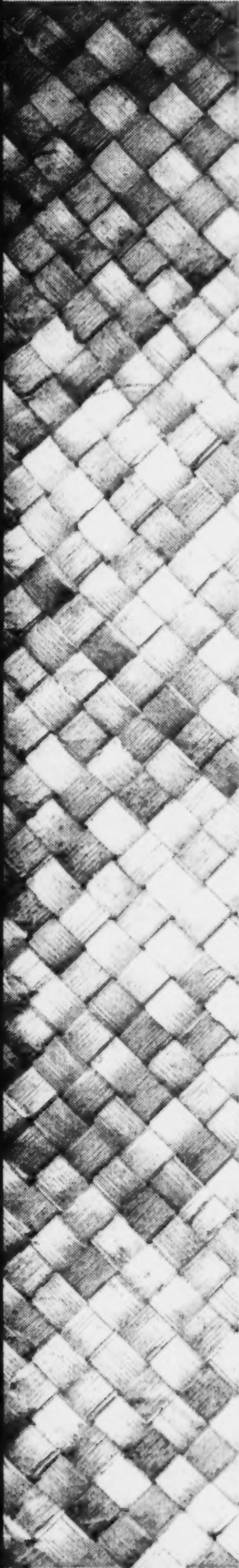
Recommendations Regarding Findings on Stress/Burnout

1. A comprehensive program to reduce stress and burnout, particularly for school administrators in Kosrae State, should be designed and implemented. Such a program may contribute to improved attendance and sense of well-being for those professionals who work most closely with students.
2. The sense of low personal accomplishment among both Potential Leavers and Non-Leavers may be a reflection of a cultural norm. In many Asian and Pacific cultures,

it is considered inappropriate to speak highly about oneself. The questions on the Maslach Burnout Inventory that pertain to personal accomplishment ask respondents to rate themselves on ability and competency. Teachers and administrators may have rated themselves lower due to their cultural sense of modesty. Perhaps the concepts of stress and burnout are regarded differently in the Pacific than on the U.S. Mainland. This possible area of research may provide insight into the psychological construct of burnout in culturally diverse contexts.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Republic of the Marshall Islands (RMI)

Research and Development Cadre

November 1999



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	7-iii
Preface	7-iv
I. Introduction	7-1
II. Methods	7-3
III. Findings	7-6
IV. Discussion	7-11
V. Limitations	7-12
VI. Recommendations	7-14
References	7-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from the Republic of the Marshall Islands	7-4
2. Characteristics of RAPSTA School Administrator Sample from the Republic of the Marshall Islands	7-4
3. Reasons Why Teachers Are Away from School in the Republic of the Marshall Islands	7-7
4. Reasons Why School Administrators Are Away from School in the Republic of the Marshall Islands	7-7
5. Reasons for Leaving Teaching in the Republic of the Marshall Islands	7-8
6. Reasons for Leaving School Administration in the Republic of the Marshall Islands	7-9
7. MBI Subscale Mean Scores for Republic of the Marshall Islands Teachers and School Administrators Compared to the Norm Sample	7-10
8. Cut-Off Scores for MBI Subscale Categories	7-10

List of Figures

1. Personal accomplishment among teachers in the Republic of the Marshall Islands 7-10
2. Emotional exhaustion among teachers in the Republic of the Marshall Islands 7-10
3. Depersonalization among teachers in the Republic of the Marshall Islands 7-10
4. Personal accomplishment among school administrators in the Republic of the Marshall Island .7-11
5. Emotional exhaustion among school administrators in the Republic of the Marshall Islands . . .7-11
6. Depersonalization among school administrators in the Republic of the Marshall Islands 7-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Uehara, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Marilyn Kabua, Republic of the Marshall Islands Ministry of Education, for her guidance and leadership in carrying out this research in the Republic of the Marshall Islands. Her efforts, along with those of the Republic of the Marshall Islands local R&D support team—Stanley Heine, Ben Jorkan, Lanny Kabua, Elmo Kabjor, Esly Kanto, Jimmy Kemem, and Tom Silk—made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' educational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For

various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in the research literature. However, research on this topic is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness. The study might provide data to formulate a further definition of stress as it applies to teachers, specifically those in the Pacific.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Of particular interest to the Republic of the Marshall Islands Ministry of Education is the possible relationship between students' academic achievement and the absenteeism, attrition, and stress/burnout rates among teachers and school administrators. Student achievement in the Republic of the Marshall Islands has declined over the years. This decline is evident through the low scores achieved on the Public High School Entrance Test. Annually, students in Grade 8 are tested, and only 33 percent of them can be accepted into the public high schools. Their test results have potentially negative implications for teachers and school administrators in the Republic of the Marshall Islands. For this reason, the Republic of the Marshall Islands was interested in participating in the study.

This study was designed to identify risk factors affecting educators in the Republic of the Marshall Islands and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and her-

itage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some people in some entities. For example, a condition referred to as "Monday sickness," occurs when male teachers, especially those who are young and single, are absent from school after a week-end of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions

geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten U.S.-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In the Republic of the Marshall Islands, an indeterminate number of teacher surveys were distributed, and 74 completed surveys were returned. Similarly, an indeterminate number of school administrator surveys were distributed, and 18 completed surveys were returned. It was not possible to calculate the return rates for either survey. However, the 74 teachers represent 16 percent of the total public school teacher workforce. The 18 school administrators represent approximately 25 percent of all public school principals. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from the Republic of the Marshall Islands

Demographic Characteristics		Number	Percentage*
Gender	Female	18	24.3
	Male	49	66.2
	No Response	7	9.5
	TOTAL	74	100.0
Ethnicity	Chuukese	1	1.4
	Fijian	2	2.7
	Marshallese	43	58.1
	Mixed	5	6.8
	No Response	23	31.1
	TOTAL	74	100.0
Age	20-29	13	17.6
	30-39	19	25.7
	40-49	26	35.1
	50+	11	14.9
	No Response	5	6.8
	TOTAL	74	100.0
Marital Status	Never Married	13	17.6
	Married	50	67.6
	Separated	1	1.4
	Divorced	2	2.7
	Widowed	1	1.4
	No Response	7	9.5
	TOTAL	74	100.0
Education	HS Graduate	34	45.9
	Associate Degree	29	39.2
	Bachelor's Degree	0	0.0
	Master's Degree	1	1.4
	Others	3	4.1
	No Response	7	9.5
	TOTAL	74	100.0
Experience	1 - 4 Years	17	23.0
	5 - 10 Years	14	18.9
	11 - 14 Years	14	18.9
	15 - 20 Years	4	5.4
	20+ Years	15	20.2
	No Response	10	13.5
	TOTAL	74	100.0
Salary	<5,000	12	16.2
	5,000 - 5,999	10	13.5
	6,000 - 6,999	10	13.5
	7,000 - 7,999	7	9.5
	8,000 - 8,999	9	12.2
	9,000+	16	21.6
	No Response	10	13.5
	TOTAL	74	100.0

*Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married Marshallese males, between the ages of 30 and 49 years, with a high school diploma (45.9%) or associate (39.2%) degree and less than 15 years of experience.

Table 2
Characteristics of RAPSTA School
Administrator Sample from the Republic of the
Marshall Islands

Demographic Characteristics		Number	Percentage*
Gender	Female	5	27.8
	Male	9	50.0
	No Response	4	22.2
	TOTAL	18	100.0
Ethnicity	Marshallese	13	72.2
	Pohnpeian	1	5.6
	No Response	4	22.2
	TOTAL	18	100.0
Age	30-34	2	11.1
	40-44	4	22.2
	45-49	6	33.3
	50+	6	33.3
	No Response	0	0.0
	TOTAL	18	100.0
Marital Status	Never Married	0	0.0
	Married	18	100.0
	Separated	0	0.0
	Divorced	0	0.0
	Widowed	0	0.0
	No Response	0	0.0
	TOTAL	18	100.0
Education	HS Graduate	3	16.7
	Associate Degree	9	50.0
	Bachelor's Degree	5	27.8
	Master's Degree	0	0.0
	Advanced Degree	0	0.0
	No Response	1	5.6
	TOTAL	18	100.0
Experience	1 - 4 Years	2	11.1
	5 - 10 Years	1	5.6
	11 - 14 Years	0	0.0
	15 - 20 Years	4	22.2
	20+ Years	11	61.1
	No Response	0	0.0
	TOTAL	18	100.0
Salary	<5,000	3	16.7
	5,000 - 5,999	1	5.6
	6,000 - 6,999	2	11.1
	7,000 - 7,999	1	5.6
	8,000 - 8,999	4	22.2
	9,000+	6	33.3
	No Response	1	5.6
	TOTAL	18	100.0

*Percentages might not sum to exactly 100 due to rounding.

Most of the school administrators are married Marshallese males, over the age of 45, with an associate (47.4%) or bachelor's (26.3%) degree and more than 15 years of experience.

Sampling

The Republic of the Marshall Islands has 76 public schools, which are spread out over 29 atolls and 5 small islands that cover a total land area of 70 square miles and that are dispersed across 750,000 square miles of the Pacific Ocean. The majority of the Marshallese populace resides on Majuro and Kwajalein atolls, where 73 percent of the school-age population attends schools (Embassy of the Republic of the Marshall Islands of the United States, 1999). Sampling for this study focused on teachers and school administrators from the 12 public schools that serve these two atolls.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from

school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely, as a means of measuring employee stress/burnout. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job

for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

Members of the local R&D Cadre visited the selected schools and gave surveys to the principals to distribute and administer. In addition, personnel who visited the RMI Ministry of Education offices were given surveys to complete. The data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys and time for PREL staff to follow up on the status of returned surveys. Completed surveys were collected by the local support team, and were then forwarded them to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in the Republic of the Marshall Islands. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition within the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in the Republic of the Marshall Islands were away from work, on average, for a total of 18.13 days. School administrators were away from work, on average, for a total of 18.59 days. Table 3 provides reasons why teachers were away from work and frequency of absence. Table 4 provides reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away from School
in the Republic of the Marshall Islands

Rank	Reason	Average # of Days Away
1	Funerals	2.86
2	Personal illness	2.47
3	Training leave	2.09
4	Meetings and workshops	2.00
5	Educational leave	1.58
6	Family member sick	1.07
7	Vacation	0.85
8	Storm, heavy rain, flood, etc.	0.65
9	Church activities	0.64
10	Lack of instructional materials	0.58
11	Working conditions	0.46
12	Administrative leave	0.41
12	Maternity leave	0.41
13	Family responsibilities	0.38
13	Transportation problem	0.38
14	Stress	0.34
15	Child care	0.28
16	Birthdays	0.26
17	Community responsibilities	0.24
18	Relationship with supervisors	0.09
19	Other	0.05
20	Wedding	0.04
21	Jury duty	0.00
21	Military training	0.00
21	Paternity leave	0.00
21	Relationship with co-workers	0.00
21	Suspension	0.00
TOTAL		18.13

In the Republic of the Marshall Islands, funerals were the leading cause of teacher absence from school, with an average of 2.86 days away. The next highest reason was personal illness, with an average of 2.47 days; followed by training leave, with an average of 2.09 days.

Republic of the Marshall Islands school administrators were most frequently away from school due to educational leave, with an average of 7.82 days absent. The next highest reasons were meetings and workshops, with an average of 4.53 days; and personal illness, with an average of 2.18 days.

Table 4
Reasons Why School Administrators Are Away
from School in the Republic of the Marshall
Islands

Rank	Reason	Average # of Days Away
1	Educational leave	7.82
2	Meetings and workshops	4.53
3	Personal illness	2.18
4	Training leave	1.71
5	Storm, heavy rain, flood, etc.	1.41
6	Church activities	0.35
7	Family responsibilities	0.29
8	Family member sick	0.18
9	Administrative leave	0.12
10	Birthdays	0.00
10	Child care	0.00
10	Community responsibilities	0.00
10	Funerals	0.00
10	Jury duty	0.00
10	Lack of instructional materials	0.00
10	Maternity leave	0.00
10	Military training	0.00
10	Other	0.00
10	Paternity leave	0.00
10	Relationship with co-workers	0.00
10	Relationship with supervisors	0.00
10	Stress	0.00
10	Suspension	0.00
10	Transportation problem	0.00
10	Vacation	0.00
10	Wedding	0.00
10	Working conditions	0.00
TOTAL		18.59

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DIS-AGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In the Republic of the Marshall Islands, 27 percent (n=20) of the surveyed teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

The top reason for leaving teaching—low salaries—is ranked first by teachers who are planning to leave as well as by those who are not. There are many other reasons why Potential Leavers might leave teaching and these reasons differentiate them from the Non-Leavers. (See rankings in Table 5). A statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different when looking at each possible reason for leaving teaching. However, no significant difference was found.

In the Republic of the Marshall Islands, 33.3 percent ($n=6$) of the surveyed school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave

for potentially leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

There are many reasons why Potential Leavers might leave school administration and these reasons differentiate them from Non-Leavers (see rankings in Table 6). Following Cochran (1954), a statistical test (Fisher Exact Test) was performed to determine if the response patterns of Potential Leavers and Non-Leavers are different for each possible reason for leaving school administration. Results of the test indicated that Potential Leavers are more likely to leave because of too much stress and students' bad attitudes.

Table 5
Reasons for Leaving Teaching in the Republic of the Marshall Islands

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	57.9	7	69.6	2
no support from school administration	68.4	3	59.1	4
no support from central office	68.4	3	59.1	4
too much stress	66.7	4	42.9	8
poor relationships with parents	26.3	13	30.4	9
students' bad attitudes	36.8	10	13.6	12
my lack of control over school policies	31.6	12	9.1	13
poor benefits	64.7	5	54.5	6
personal health problems	63.2	6	63.6	3
many disagreements about how to teach	31.6	12	18.2	11
not enough school materials and supplies	70.0	2	56.5	5
low salaries	90.0	1	73.9	1
too many responsibilities	21.1	14	13.6	12
pressure from the community	33.3	11	27.3	10
retirement	47.1	8	63.6	3
promotion	42.1	9	45.5	7
poor relationship with other teachers	16.7	15	18.2	11

Table 6
Reasons for Leaving Administration in the Republic of the Marshall Islands

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	75.0	3	87.5	1
no support from school staff	66.7	4	57.1	6
no support from central office administration	80.0	2	62.5	5
too much stress *	83.3	1	14.3	11
poor relationships with parents	75.0	3	25.0	10
students' bad attitudes *	83.3	1	25.0	10
my lack of control over school policies	60.0	5	33.3	9
poor benefits	50.0	6	66.7	4
personal health problems	80.0	2	75.0	3
too many disagreements about how to run my school	33.3	7	50.0	7
not enough school materials and supplies	83.3	1	57.1	6
low salaries	83.3	1	75.0	3
too many responsibilities	50.0	6	25.0	10
pressure from the community	83.3	1	50.0	7
retirement	83.3	1	77.8	2
promotion	66.7	4	37.5	8
poor relationship with teachers	50.0	6	12.5	12
poor relationship with staff	50.0	6	25.0	10
political reasons	66.7	4	62.5	5

* $p < .10$

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave the education field was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.

3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of mean scores for all teacher and school administrator respondents, with scores from the norm sample. Republic of the Marshall Islands teachers experience a lower sense of personal accomplishment than the norm sample. However, teachers and school administrators are less emotionally exhausted and feel less depersonalized than the norm sample.

School administrators exhibit higher scores regarding feelings of personal accomplishment than do teachers and those in the norm sample.

Table 7

MBI Subscale Scores for Republic of the Marshall Islands Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size*	Mean Score
Personal Accomplishment (PA)		
Republic of the Marshall Islands Teachers	74	32.8
Republic of the Marshall Islands School Administrators	12	35.8
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Republic of the Marshall Islands Teachers	74	20.2
Republic of the Marshall Islands School Administrators	12	17.8
Norm Sample	4,163	21.3
Depersonalization (DP)		
Republic of the Marshall Islands Teachers	74	7.5
Republic of the Marshall Islands School Administrators	13	7.4
Norm Sample	4,163	11.0

*Sample sizes vary due to non-responses.

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into High, Moderate, and Low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high *lack* of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8

Cut-off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. Republic of the Marshall Islands teachers who might leave have a higher sense of personal accomplishment; however,

they feel more emotionally exhausted and more depersonalized than Non-Leavers. On the other hand, school administrators who might leave show lower levels of personal accomplishment, are more emotionally exhausted, and feel more depersonalized than their non-leaving peers.

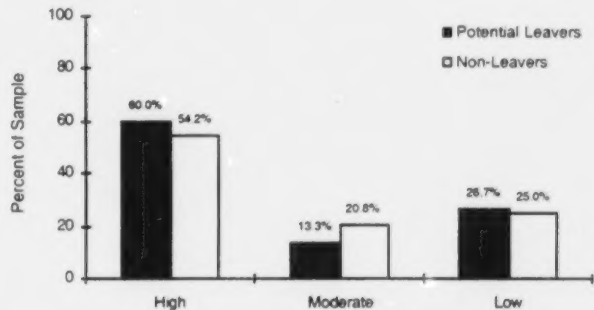


Figure 1. Personal accomplishment among teachers in the Republic of the Marshall Islands

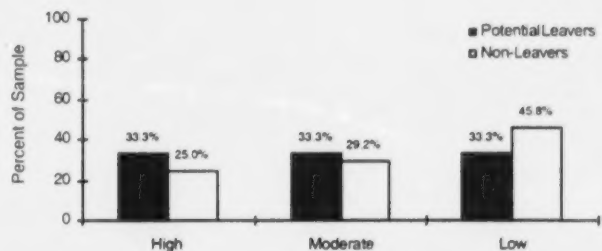


Figure 2. Emotional exhaustion among teachers in the Republic of the Marshall Islands

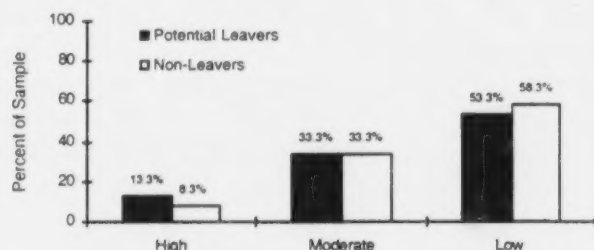


Figure 3. Depersonalization among teachers in the Republic of the Marshall Islands

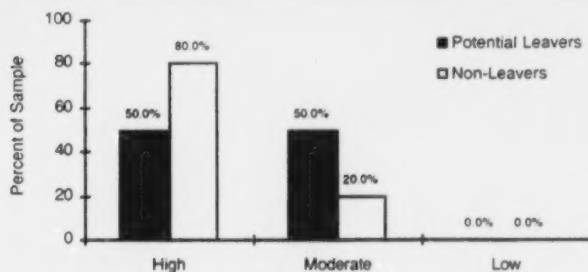


Figure 4. Personal accomplishment among school administrators in the Republic of the Marshall Islands

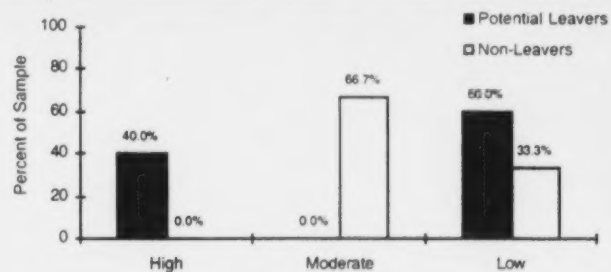


Figure 5. Emotional exhaustion among school administrators in the Republic of the Marshall Islands

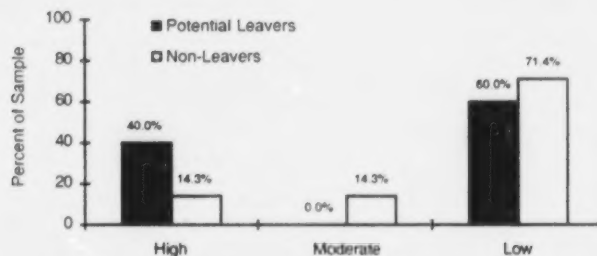


Figure 6. Depersonalization among school administrators in the Republic of the Marshall Islands

IV. Discussion

Absenteeism

Absenteeism among teachers and school administrators in the Republic of the Marshall Islands appears to be a problem. For example, teachers are away from work an average of 18.13 days. School administrators are away from work an average of 18.59 days. These numbers are among the highest across all of PREL's entities in the Pacific region.

Teacher absences are due primarily to funerals, personal illness, and training leave—reasons that tend to be of immediate concern to teachers (Scott & Wimbush, 1991). The number of days absent due to funerals (2.86) is also the highest reported by any entity. Funerals are culturally sanctioned occasions that often require participation in events that take place during school hours.

School administrator absences are most often due to educational leave, averaging 7.82 days away; meetings and workshops, 4.53 days; and personal illness, 2.18 days. Professional obligations are not under the direct control of school administrators but require their participation.

Attrition

Twenty-seven percent of teachers agreed with the statement, "I plan to leave teaching within the next two years." The top reason selected for leaving was low salaries, ranked number one by teachers who were planning to leave as well as by those who were not. Potential Leavers are more likely to leave for the following reasons: not enough school materials and supplies, no support from school administration, no support from central office, and too much stress. Because of difficulties accessing remote

islands, central office responses to requests for supplies and materials can be delayed, thus causing frustration. The majority of teachers are under the age of 50, with less than 15 years of experience. Therefore, leaving the profession can seem viable as an option. Low salaries have been a problem for several years. Teachers often leave RMI in order to teach in places that offer higher salaries—such as Guam and the Commonwealth of the Northern Mariana Islands—or they leave teaching altogether for a higher-paying position in another field.

Among school administrators, Potential Leavers ranked too much stress, students' bad attitudes, not enough school materials and supplies, low salaries, pressure from the community, and retirement as the primary reasons for leaving the public school system. Most of the Republic of the Marshall Islands school administrators in this study are over the age of 45 and have more than 20 years of experience; they are closely approaching retirement both in age and years of service.

Burnout

Approximately 27 percent of Republic of the Marshall Islands teachers might leave within the next two years; they report a higher sense of personal accomplishment, but more emotional exhaustion and more depersonalization at work. Teachers who might leave teaching in the Republic of the Marshall Islands appear to experience some aspects of occupational burnout.

Thirty-three percent of the Republic of the Marshall Islands school administrators might leave within the next two years; they experience a lower sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized than their non-leaving peers. School administrators who might leave also appear to experience aspects of occupational burnout.

The common reasons given for leaving teaching or school administration are lack of support (either from school administration or central office) and low salaries. Teachers also cited too much stress, and school administrators mentioned retirement as a top reason for leaving. Even though teachers might feel that they are putting forth their best efforts, low salaries and lack of support cause frustration and resentment.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in

measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item, and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even

with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.
2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents *might* leave and reasons that *might* cause them to leave, perhaps asking whether or not they were *going to* leave and *why* would have provided more definitive information.
3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Sampling

The unique relationship between the RMI Department of Education and the local, privately-run school districts presented challenges for survey distribution and collection. In order not to interfere with the local school administration, the data were collected after school let out for the summer. Consequently, convenience samples of teachers and school administrators were used.

Most educators are no longer at their school site during the summer months. However, many of the teachers sampled were those participating in a school-wide summer project at Ebeye School on Kwajalein Atoll. These teachers were accessible and willing to participate. Additional teachers and school administrators who participated were those who visited the state office during the summer (usually those on-island who came by to pick up their paychecks) and volunteered to complete surveys.

Convenience sampling raises issues of representativeness, and consequently, generalizability of

results. Because most teachers sampled in this study are from the more populated islands—the sample represents all teachers on Majuro and Kwajalein—the results can at least be generalized to these central locales. For example, given that most teachers from remote schools were not included in the sample, the number of days teachers report being away may be an under (or over) representation for teachers across the RMI.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question “I might leave teaching within the next two years” and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the “I might leave” question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in the Republic of the Marshall Islands. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

Absenteeism among teachers and school administrators in the Republic of the Marshall Islands appears to be a problem. Teachers are away from work, on average, a total of 18.13 days. School administrators are away from work, on average, a total of 18.59 days. These numbers are among the highest in the U.S.-affiliated Pacific. Although reasons for some absences might be valid, the very high rates of absenteeism for both teachers and school administrators are problematic. The difficulties associated with these high rates of absenteeism are com-

pounded by the fact that no substitute teachers or administrators are available in the Republic of the Marshall Islands.

It is therefore recommended that Republic of the Marshall Islands educators seriously consider the need to improve their school attendance. Existing attendance policies should be reviewed for appropriate action. In the absence of current attendance policies, written policies should be developed and consistently implemented through an appropriate accountability system that includes sanctions and rewards. For children to make academic progress, they need guidance and leadership from their teachers and school administrators; these educators provide necessary and important instruction, both verbally and by example.

Recommendations Regarding Findings on Attrition

In the Republic of the Marshall Islands, there are numerous reasons for teachers to leave the teaching field: low salaries, no support from school administration or central office, and too much stress. For

school administrators, Potential Leavers are more likely to leave because of too much stress and students' bad attitudes.

To contribute to staff stability, a pro-active program aimed at reducing the attrition rate of teachers and school administrators should be designed and implemented by the public school system. Staff stability, in turn, might contribute to better student performance and achievement.

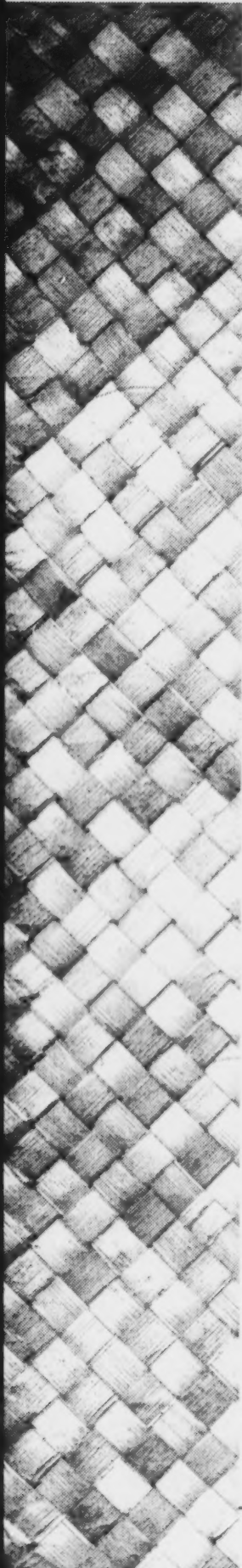
Recommendations Regarding Findings on Stress/Burnout

In the Republic of the Marshall Islands, teachers who might leave within the next two years reported

more emotional exhaustion and depersonalization at work. School administrators who might leave reportedly experience a lower sense of personal accomplishment, are more emotionally exhausted, and have more feelings of depersonalization than their non-leaving peers. These findings indicate some aspects of occupational burnout; therefore, it is recommended that the Republic of the Marshall Islands Ministry of Education design and implement a comprehensive program to reduce stress and burnout among educators. Such a program could contribute to improved attendance and well-being of those who work most closely with students.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A., & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Embassy of the Republic of the Marshall Islands of the United States. (1999). *RMI on-line: Internet guide to the Republic of the Marshall Islands*. [Online]. Available: <http://www.rmiembassyus.org> [1999, November].
- Farber, B., & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://eric-web.tc.columbia.edu/digests/dig75.html> [1999, November].
- Hammond, O., & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H., & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C., & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *The Maslach Burnout Inventory—Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, volume III* (pp. 419 – 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D., & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Republic of Palau

Research and Development Cadre

August 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgements	8-iii
Preface	8-iv
I. Introduction	8-1
II. Methods	8-3
III. Findings	8-7
IV. Discussion	8-11
V. Limitations	8-12
VI. Recommendations	8-14
References	8-15

List of Tables

1. Characteristics of RAPSTA Teacher Sample from the Republic of Palau	8-4
2. Characteristics of RAPSTA School Administrator Sample from the Republic of Palau	8-4
3. Reasons Why Teachers Are Away from School in the Republic of Palau	8-7
4. Reasons Why School Administrators Are Away from School in the Republic of Palau	8-7
5. Reasons for Leaving Teaching in the Republic of Palau	8-8
6. Reasons for Leaving School Administration in the Republic of Palau	8-9
7. MBI Subscale Mean Scores for Republic of Palau Teachers and School Administrators Compared to the Norm Sample	8-10
8. Cut-Off Scores for MBI Subscale Categories	8-10

List of Figures

1. Personal accomplishment among teachers in the Republic of Palau 8-10
2. Emotional exhaustion among teachers in the Republic of Palau 8-10
3. Depersonalization among teachers in the Republic of Palau 8-10
4. Personal accomplishment among school administrators in the Republic of Palau 8-11
5. Emotional exhaustion among school administrators in the Republic of Palau 8-11
6. Depersonalization among school administrators in the Republic of Palau 8-11

Acknowledgements

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre members Edwel Ongrung, Systems Manager, and Masaharu Tmodrang, Chief, Curriculum Planning and Improvement, for their guidance and leadership in carrying out this research in the Republic of Palau. Their efforts, along with support from Billy G. Kuartei, Minister of Education, and Masa-Aki N. Emesiochl, Director, Bureau of Curriculum and Instruction, made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' educational opportunities may be seriously compro-

mised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in the research literature. However, research on this topic is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Of particular interest to the Republic of Palau is understanding the reasons that prompt teachers to leave the teaching profession. Also of interest are the factors that lead to absenteeism and the reasons why some teachers do not perform up to their potential.

This study was designed to identify risk factors affecting educators in the Republic of Palau and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region

with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Sanctioned time off. Habitual time off may be tolerated in some entities. For example, a condition referred to as "Monday sickness," occurs when male teachers, especially those who are young and single, are absent from school after a weekend of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and excessive rain in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in Palau and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. Two hundred and sixteen teacher surveys were distributed, and 159 completed surveys were returned, resulting in a 74 percent response rate. Twenty-one school administrator surveys were distributed, and 20 completed surveys were returned, resulting in a 95 percent response rate. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from the Republic of Palau

Demographic Characteristics		Number	Percentage*
Gender	Female	95	59.7
	Male	44	27.7
	No Response	20	12.6
	TOTAL	159	100.0
Ethnicity	Palauan	143	89.9
	Others	9	5.7
	No Response	7	4.4
	TOTAL	159	100.0
Age	20-29	10	6.3
	30-39	31	19.5
	40-49	74	46.5
	50+	39	24.5
	No Response	5	3.1
	TOTAL	159	100.0
Marital Status	Never Married	28	17.6
	Married	98	61.6
	Separated	9	5.7
	Divorced	6	3.8
	Widowed	9	5.7
	No Response	9	5.7
	TOTAL	159	100.0
Education	HS Graduate	26	16.4
	Associate Degree	44	27.7
	Bachelor's Degree	70	44.0
	Master's Degree	6	3.8
	Others	7	4.4
	No Response	6	3.8
	TOTAL	159	100.0
Experience	1 - 4 Years	25	15.7
	5 - 10 Years	25	15.7
	11 - 14 Years	10	6.3
	15 - 20 Years	14	8.8
	20+ Years	75	47.2
	No Response	10	6.3
	TOTAL	159	100.0
Salary	< 4,000	2	1.3
	4,000 - 6,999	6	3.8
	7,000 - 9,999	28	17.6
	10,000 - 12,999	37	23.3
	13,000 - 15,999	57	35.8
	16,000+	6	3.8
	No Response	23	14.5
	TOTAL	159	100.0

* Percentages might not sum to exactly 100 due to rounding.

Table 2
Characteristics of RAPSTA School
Administrator Sample from
the Republic of Palau

Demographic Characteristics		Number	Percentage*
Gender	Female	6	30.0
	Male	13	65.0
	No Response	1	5.0
	TOTAL	20	100.0
Ethnicity	Palauan	18	90.0
	No Response	2	10.0
	TOTAL	20	100.0
Age	25-29	2	10.0
	35-39	1	5.0
	45-49	3	15.0
	50+	13	65.0
	No Response	1	5.0
	TOTAL	20	100.0
Marital Status	Never Married	4	20.0
	Married	13	65.0
	Divorced	1	5.0
	Widowed	1	5.0
	No Response	1	5.0
	TOTAL	20	100.0
Education	HS Graduate	1	5.0
	Associate Degree	4	20.0
	Bachelor's Degree	10	50.0
	Master's Degree	4	20.0
	Others	1	5.0
	No Response	0	0.0
	TOTAL	20	100.0
Experience	1 - 4 Years	3	15.0
	5 - 10 Years	0	0.0
	11 - 14 Years	3	15.0
	15 - 20 Years	2	10.0
	20+ Years	12	60.0
	No Response	0	0.0
	TOTAL	20	100.0
Salary	< 4,000	1	5.0
	10,000 - 12,999	1	5.0
	13,000 - 15,999	6	30.0
	16,000 +	9	45.0
	No Response	3	15.0
	TOTAL	20	100.0

* Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married Palauan females, over 40 years of age, with either an associate (27.7%) or bachelor's (44.0%) degree and more than 15 years of experience.

Most of the school administrators are married Palauan males, over 50 years of age, with a bachelor's degree (50%) and more than 20 years of experience.

Sampling

To ensure a high response rate for the Republic of Palau, the R&D Cadre decided to survey teachers and school administrators from all 21 schools. However, due to environmental factors and limited time, three remote schools and one central school were not included in the Palau sample.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the state-

ment, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving

the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, the rationale used for school selection, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

At two elementary schools and one high school in Koror, surveys were administered in group settings by the Cadre member. For elementary schools outside of Koror, principals administered the survey to their teachers and were responsible for data collection. The Cadre member trained principals in this process at the time of the administrator survey.

Data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys and time for PREL staff to follow up on the status of returned surveys. Surveys were collected after being completed by each school's teachers and administrators. The Cadre member collected the completed surveys, then forwarded them to PREL in Honolulu for data entry and preliminary analysis.

An important part of the procedure was the administration of the survey instruments. During group administration, those present filled out the survey and submitted it to the Cadre member; at locations where the principals administered the survey, completed surveys were placed in an envelope and turned over to the Cadre member.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in the Republic of Palau. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in the Republic of Palau sample were away from work, on average, for a total of 10.60 days. School administrators in the sample were away from work, on average, for a total of 15.30 days. Table 3 provides reasons why teachers were away from work and frequency of absence. Table 4 provides reasons why school administrators were away from work and frequency of absence.

Table 3

Reasons Why Teachers Are Away from School in the Republic of Palau

Rank	Reason	Average # of Days Away
1	Personal illness	3.60
2	Funerals	1.69
3	Family member sick	1.03
4	Meetings and workshops	0.80
5	Educational leave	0.60
6	Family responsibilities	0.57
7	Vacation	0.43
8	Administrative leave	0.40
9	Child care	0.38
10	Maternity leave	0.26
11	Birthdays	0.19
12	Stress	0.13
13	Training leave	0.09
14	Church activities	0.08
14	Other	0.08
15	Working conditions	0.06
15	Relationship with supervisors	0.06
16	Transportation problem	0.04
16	Lack of instructional materials	0.04
17	Community responsibilities	0.03
18	Jury duty	0.02
19	Relationship with co-workers	0.01
19	Storm, heavy rain, flood, etc.	0.01
20	Military training	0.00
20	Paternity leave	0.00
20	Suspension	0.00
20	Weddings	0.00
TOTAL		10.60

Table 4

Reasons Why School Administrators Are Away from School in the Republic of Palau

Rank	Reason	Average # of Days Away
1	Meetings and workshops	4.10
2	Funerals	2.65
3	Family member sick	2.45
4	Personal illness	1.90
5	Vacation	1.25
6	Administrative leave	0.85
7	Training leave	0.70
8	Family responsibilities	0.65
9	Transportation problem	0.25
10	Child care	0.20
11	Birthdays	0.10
11	Community responsibilities	0.10
11	Stress	0.10
12	Church activities	0.00
12	Educational leave	0.00
12	Jury duty	0.00
12	Lack of instructional materials	0.00
12	Maternity leave	0.00
12	Military training	0.00
12	Other	0.00
12	Paternity leave	0.00
12	Relationship with co-workers	0.00
12	Relationship with supervisors	0.00
12	Storm, heavy rain, flood, etc.	0.00
12	Suspension	0.00
12	Weddings	0.00
12	Working conditions	0.00
TOTAL		15.36

Republic of Palau school administrators are most frequently away from school due to meetings and workshops, with an average of 4.10 days. This is followed by funerals, with an average of 2.65 days, and a sick family member, with an average of 2.45 days.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance

of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In the Republic of Palau, 27.04 percent (N=43) of the surveyed teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

Personal health problems, low salaries, and retirement are ranked as the top three reasons for leaving teaching in the Republic of Palau, by both teachers who are planning to leave as well as those who are not.

A statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different for each possible reason for leaving teaching. Potential Leavers are

more likely to leave for the following reasons: poor relationships with parents, students' bad attitudes, too many disagreements about how to teach, not enough school supplies and materials, and pressure from the community.

In the Republic of Palau, 10 percent (N=2) of school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave for leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

There are many reasons why Potential Leavers might leave school administration, and these reasons differentiate them from Non-Leavers. For each possible reason for leaving school administration, a statistical test (Fisher Exact Test) was performed to determine if the response patterns of Potential Leavers and Non-Leavers are different. Following Cochran (1954), the Fisher Exact Test was used because of the small sample size (N=20). No statistical differences were found between the two groups.

Table 5
Reasons for Leaving Teaching in the Republic of Palau

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	39.5	13	45.0	9
no support from school administration	53.9	9	60.5	3
no support from central office	56.8	6	56.8	5
too much stress	60.5	4	48.2	8
poor relationships with parents **	55.0	8	29.6	12
students' bad attitudes *	46.2	11	23.5	14
my lack of control over school policies	39.5	13	13.5	16
poor benefits	60.0	5	53.2	6
personal health problems	64.1	3	67.1	2
too many disagreements about how to teach *	48.7	10	27.5	13
not enough school materials and supplies *	56.1	7	35.8	10
low salaries	69.2	2	58.5	4
too many responsibilities	40.0	12	23.5	14
pressure from the community *	48.7	10	30.0	11
retirement	70.0	1	74.1	1
promotion	64.1	3	50.6	7
poor relationship with other teachers	34.2	14	22.2	15

* $p \leq .05$

** $p \leq .01$

Table 6
Reasons for Leaving Administration in the Republic of Palau

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	0.0	3	46.7	6
no support from school staff	0.0	3	26.7	9
no support from central office administration	100.0	1	60.0	4
too much stress	0.0	3	53.3	5
poor relationships with parents	0.0	3	33.3	8
students' bad attitudes	0.0	3	13.3	12
my lack of control over school policies	100.0	1	33.3	8
poor benefits	100.0	1	46.7	6
personal health problems	100.0	1	88.2	1
too many disagreements about how to run my school	100.0	1	25.0	10
not enough school materials and supplies	0.0	3	40.0	7
low salaries	100.0	1	60.0	4
too many responsibilities	0.0	3	21.4	11
pressure from the community	100.0	1	53.3	5
retirement	50.0	2	80.0	2
promotion	100.0	1	64.3	3
poor relationship with teachers	100.0	1	33.3	8
poor relationship with staff	100.0	1	33.3	8
political reasons	100.0	1	40.0	7

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave education was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A *high degree of burnout* is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A *medium degree of burnout* is reflected in moderate scores on the three subscales.
3. A *low degree of burnout* is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of scores from the norm sample with mean scores for all teacher and school administrator respondents. Republic of Palau teachers experience a higher sense of personal accomplishment than both school administrators and the norm sample. In addition, they are less emotionally exhausted and have a lower sense of depersonalization than the norm sample. They display a high degree of engagement in their work.

School administrators, on the other hand, experience slightly less personal accomplishment than the norm sample. However, they are less emotionally exhausted and have a lower sense of depersonalization than both the norm sample and teachers. Therefore, in the Republic of Palau, the majority of educators do not appear to experience occupational burnout.

Table 7
MBI Subscale Scores for Republic of Palau Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size	Mean Score
Personal Accomplishment (PA)		
Republic of Palau Teachers	159	35.3
Republic of Palau School Administrators	20	33.2
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Republic of Palau Teachers	159	16.4
Republic of Palau School Administrators	20	14.4
Norm Sample	4,163	21.3
Depersonalization (DP)		
Republic of Palau Teachers	159	5.5
Republic of Palau School Administrators	20	3.6
Norm Sample	4,163	11.0

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into High, Moderate, and Low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high *lack* of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. Republic of Palau teachers who agreed that they

might leave within the next two years experience less personal accomplishment than Non-Leavers, are more emotionally exhausted, and feel more depersonalized than the Non-Leavers. Thus, teachers in the Republic of Palau who might leave teaching within the next two years appear to experience all aspects of occupational burnout. In contrast, school administrators who agreed that they might leave within the next two years experience more personal accomplishment than Non-Leavers.

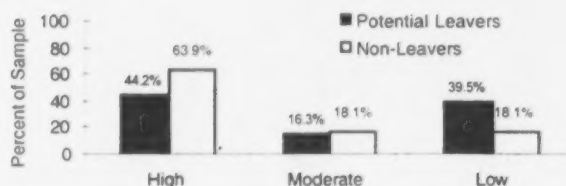


Figure 1. Personal accomplishment among teachers in the Republic of Palau

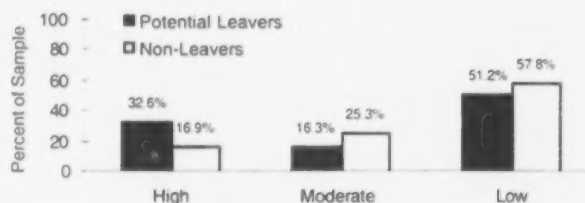


Figure 2. Emotional exhaustion among teachers in the Republic of Palau

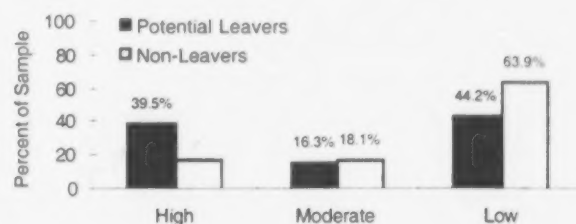


Figure 3. Depersonalization among teachers in the Republic of Palau

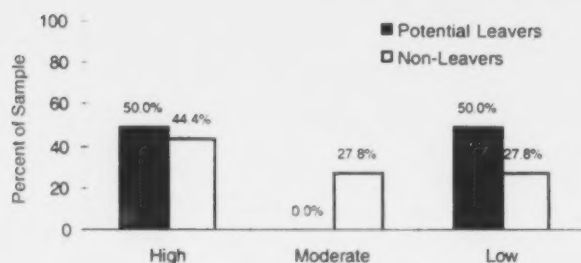


Figure 4. Personal accomplishment among school administrators in the Republic of Palau

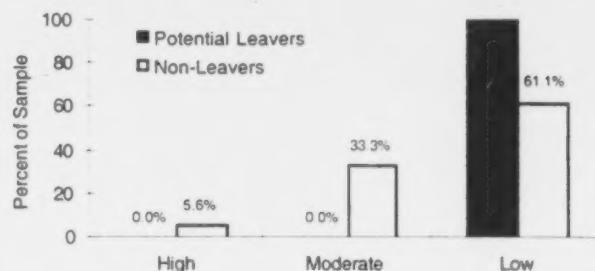


Figure 5. Emotional exhaustion among school administrators in the Republic of Palau



Figure 6. Depersonalization among school administrators in the Republic of Palau

IV. Discussion

Absenteeism

Absenteeism in the Republic of Palau is higher than in many of the other Pacific entities, with teachers averaging 10.6 days away, and school administrators averaging 15.3 days away from school. Teachers cited three main reasons for being away from school: personal illness, funeral, and a sick family member. These are factors that tend to be of immediate concern to teachers (Scott & Wimbush, 1991), and some are unavoidable events in the lives of educators in the Republic of Palau. Funerals, for example, are a cultural obligation that cannot be avoided. When relatives and in-laws die, other family members are obligated to attend the funeral. Sometimes attendance is required for a period of three to five days, resulting in an educator's absence from school.

The top three reasons why school administra-

tors were away from school include: meetings and workshops, funerals, and a sick family member. School administrators attend quarterly meetings in addition to a number of unscheduled special meetings. Sometimes they are sent outside of Palau for conferences and workshops. Vast geographical distances and limited flight schedules might cause absences of more than a week at a time.

Attrition

Approximately 27 percent of teachers in the Republic of Palau report that, within the next few years, they might leave teaching. Their reasons include personal health problems, low salaries, and retirement. In addition, teachers who plan to leave within the next two years are more likely to leave for the following reasons: poor relationships with parents, students' bad attitudes, too many dis-

agreements about how to teach, not enough school materials and supplies, and pressure from the community.

Ten percent of school administrators in Palau report that they might leave within the next two years, but none of their reasons for leaving significantly differentiate them from their non-leaving peers.

Burnout

Although teachers, in general, in the Republic of Palau experience less burnout than their U.S. Mainland counterparts, those who might leave within the next two years seem to be experiencing all aspects of occupational burnout. These teachers (Potential Leavers) exhibit a lower sense of per-

sonal accomplishment, are more emotionally exhausted, and feel a stronger sense of depersonalization than their non-leaving counterparts. Thus, in the Republic of Palau, attrition and burnout appear to be related.

School administrators, in general, experience a slightly lower sense of personal accomplishment than the norm sample. However, those who may leave within the next two years experience a higher sense of personal accomplishment, extremely low levels of emotional exhaustion, and low levels of depersonalization. It appears that occupational burnout is not a problem for school administrators in the Republic of Palau and is not the reason that causes some to leave.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of its results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intend-

ed to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.

2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents *might* leave and reasons that *might* cause them to leave, perhaps asking whether or not they were *going* to leave and *why* would have provided more definitive information.
3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calcu-

late each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which

that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in the Republic of Palau. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

The absenteeism rates for teachers appears to be moderately high in the Republic of Palau, with 10.58 days away. Absences for teachers and school administrators are due to a wide range of reasons that might be valid (personal illness, funerals, sick family members) but the high rate of absenteeism may be problematic. It is therefore recommended that serious attention be paid to the need to improve the attendance of educators in the Republic of Palau. Existing policies on attendance should be reviewed for appropriate action. In the absence of formal attendance policies, written policies should be developed and consistently implemented.

Recommendations Regarding Findings on Attrition

In the Republic of Palau, numerous reasons cause teachers to leave the teaching profession. These include poor relationships with parents, students' bad attitudes, too many disagreements about how to teach, not enough school supplies and materials, and pressure from the community. However, teacher employment records from Palau indicate that attrition is very low and that even transfers between schools are not frequent. This employment history seems to indicate that teach-

ers are in for the long haul and may leave mostly because of retirement.

Similarly, attrition of school administrators does not appear to be a problem. If it becomes an issue, future research will be needed to identify reasons why school administrators choose to leave the school administration field in the Republic of Palau.

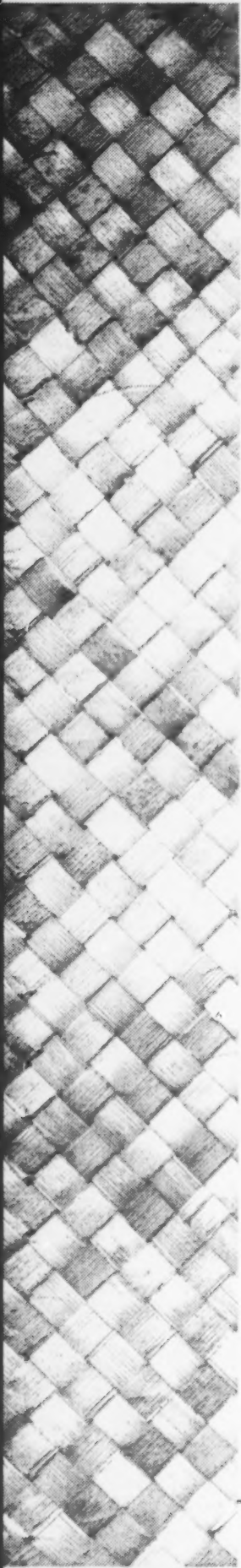
Recommendations Regarding Findings on Stress/Burnout

In the Republic of Palau, teachers and school administrators, in general, experience less burnout than their Mainland counterparts. Teachers exhibit a higher sense of personal accomplishment, are less emotionally exhausted, and experience a lesser degree of depersonalization than the norm sample. They display a high degree of engagement in their work. School administrators experience only a slightly lower sense of personal accomplishment than the norm sample.

Although occupational burnout is not a problem for school administrators in the Republic of Palau, it is a problem for teachers who feel that they might leave teaching within the next two years. These teachers (Potential Leavers) exhibit a lower sense of personal accomplishment, are more emotionally exhausted, and feel a stronger sense of depersonalization than their non-leaving counterparts. To minimize this potential attrition, it is recommended that the public school system design and implement a pro-active program that will minimize stress and burnout among teachers. Such a program might focus on reducing the factors that lead to a low sense of personal accomplishment, emotional exhaustion, and depersonalization, where possible, as well as help personnel learn effective strategies for coping with the demands that lead to stress and burnout.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary* (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, Volume III* (pp. 419 – 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Pohnpei State, Federated States of Micronesia

Research and Development Cadre

July 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	9-iii
Preface	9-iv
I. Introduction	9-1
II. Methods	9-3
III. Findings	9-7
IV. Discussion	9-11
V. Limitations	9-13
VI. Recommendations	9-14
References	9-16

List of Tables

1. Characteristics of RAPSTA Teacher Sample from Pohnpei State	9-4
2. Characteristics of RAPSTA School Administrator Sample from Pohnpei State	9-4
3. Reasons Why Teachers Are Away from School in Pohnpei State	9-7
4. Reasons Why School Administrators Are Away from School in Pohnpei State	9-8
5. Reasons for Leaving Teaching in Pohnpei State	9-8
6. Reasons for Leaving School Administration in Pohnpei State	9-9
7. MBI Subscale Mean Scores for Pohnpei State Teachers and School Administrators Compared to the Norm Sample	9-10
8. Cut-Off Scores for MBI Subscale Categories	9-10

List of Figures

1. Personal accomplishment among teachers in Pohnpei State 9-10
2. Emotional exhaustion among teachers in Pohnpei State 9-11
3. Depersonalization among teachers in Pohnpei State 9-11
4. Personal accomplishment among school administrators in Pohnpei State 9-11
5. Emotional exhaustion among school administrators in Pohnpei State 9-11
6. Depersonalization among school administrators in Pohnpei State 9-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Hanover Ehsa, Chief of Educational Services and Development, Pohnpei Department of Education, for his guidance and leadership in carrying out this research in Pohnpei State. His efforts, along with those of the Pohnpei State local R&D support team—Director Damian G. Sohl, Albert Augustin, Francisco Cantero, Percilla Enicar, Joseph Felix, Dageo Jano, Penny Jimmy, Ander Joseph, Ewalt Joseph, and Casiano Shoniber—made this study possible.

PREL R&D Cadre Members, 1996-1998

Faauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as entities in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no

substitute teacher pool is available, students' educational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in the research literature. However, research on this topic is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk"; for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

Issues of particular interest to Pohnpei State are high rates of teacher absenteeism and attrition, and stress and burnout among teachers and school administrators.

This study was designed to identify risk factors affecting educators in Pohnpei State and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwaricki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region with its unique educational, cultural, and geographical contexts. Pacific schools have adopted

the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some people in some entities. For example, a condition referred to as "Monday sickness," occurs when male teachers, especially those who are young and single, are absent from school after a weekend of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars in which they designed the study, developed data collection instruments, and analyzed the data. Cadre members then shared the collected information with their local R&D support teams.

Subjects

The unit of analysis for the RAPSTA study is the elementary and secondary-level teacher and school administrator. In Pohnpei State, the survey included 179 teachers and 30 school administrators from nine public elementary schools and one public high school selected to represent the school system. All surveys were completed and returned, yielding a 100 percent response rate. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from Pohnpei State

Demographic Characteristics		Number	Percentage*
Gender	Female	54	30.2
	Male	111	62.0
	No Response	14	7.8
	TOTAL	179	100.0
Ethnicity	Australian	1	0.6
	Chuukese	10	5.6
	Filipino	14	7.8
	Kapingamarangian	6	3.4
	Mixed Micronesian	21	11.7
	Mokilloan	8	4.5
	Mortlockese	2	1.1
	Nukuoran	3	1.7
	Pingelapese	11	6.1
	Pohnpeian	82	46.0
	Others	2	1.1
	No Response	19	10.6
	TOTAL	179	100.0
Age	20-29	30	16.8
	30-39	52	29.1
	40-49	54	30.2
	50+	35	19.6
	No Response	8	4.5
	TOTAL	179	100.0
Marital Status	Never Married	20	11.2
	Married	144	80.4
	Separated	3	1.7
	Divorced	2	1.1
	No Response	10	5.6
	TOTAL	179	100.0
Education	HS Graduate	18	10.1
	Associate Degree	66	36.9
	Bachelor's Degree	78	43.6
	Master's Degree	1	0.6
	Others	8	4.5
	No Response	8	4.5
	TOTAL	179	100.0
Experience	1 - 4 Years	23	12.8
	5 - 10 Years	37	20.7
	11 - 14 Years	27	15.1
	15 - 20 Years	34	19.0
	20+ Years	37	20.7
	No Response	21	11.7
	TOTAL	179	100.0
Salary	< 4,000	13	7.3
	4,000 - 4,999	5	2.8
	6,000 - 6,999	4	2.2
	7,000 - 7,999	6	3.4
	8,000 +	121	67.6
	No Response	30	16.8
	TOTAL	179	100.0

*Percentages might not sum to exactly 100 due to rounding.

The majority of teachers are married Pohnpeian males, between the ages of 30 and 49 years, with either an associate (36.9%) or bachelor's (43.6%) degree.

Table 2
Characteristics of RAPSTA School
Administrator Sample from Pohnpei State

Demographic Characteristics		Number	Percentage*
Gender	Female	2	6.7
	Male	27	90.0
	No Response	1	3.3
	TOTAL	30	100.0
Ethnicity	Kapingamarangian	1	3.3
	Pingelapese	1	3.3
	Nukuoran	2	6.7
	Pohnpeian	20	66.7
	Mixed Micronesian	3	10.0
	Other	1	3.3
	No Response	2	6.7
	TOTAL	30	100.0
Age	35-39	2	6.7
	40-44	4	13.3
	45-49	6	20.0
	50+	18	60.0
	No Response	0	0.0
	TOTAL	30	100.0
Marital Status	Never Married	3	10.0
	Married	17	56.7
	Separated	8	26.7
	Widowed	1	3.3
	No Response	1	3.3
	TOTAL	30	100.0
Education	HS Graduate	0	0.0
	Associate Degree	12	40.0
	Bachelor's Degree	15	50.0
	Master's Degree	1	3.3
	No Response	2	6.7
	TOTAL	30	100.0
Experience	1 - 4 Years	2	6.7
	5 - 10 Years	1	3.3
	11 - 14 Years	2	6.7
	15 - 20 Years	4	13.3
	20+ Years	18	60.0
	No Response	3	10.0
	TOTAL	30	100.0
Salary	< 10,000	2	6.7
	10,000 - 14,999	7	23.3
	15,000 - 19,999	19	63.3
	20,000+	1	3.3
	No Response	1	3.3
	TOTAL	30	100.0

*Percentages might not sum to exactly 100 due to rounding.

Most school administrators are married Pohnpeian males, over 50 years of age, with a bachelor's degree (50.0%) and more than 20 years of experience.

Sampling

In order to ensure a high rate of response, the R&D Cadre surveyed all teachers and school administrators from representatively sampled schools. This process is referred to as *cluster sampling*, because clusters are chosen to represent the population. In selecting representative schools from Pohnpei State, four variables were considered: 1) ethnolinguistic diversity; 2) local municipalities; 3) school size and level; and 4) degree of school remoteness. Based on these criteria, 10 of the 34 schools in Pohnpei State were selected to represent the school system—seven schools on the main island of Pohnpei and three schools on the outer islands.

All the teachers and principals/vice principals in those ten schools were included in the sample. School principals and vice principals of non-targeted schools on the main island of Pohnpei were also included in the study in order to increase the sample size.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory—Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional

energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).

- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their

jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

An important part of the procedures was the administration of the survey. In Pohnpei State, a special meeting for school administrators on the main island was called at the DOE Central Office. An R&D cadre member, the local support team, and a PREL staff member distributed the survey instrument. Directions were given primarily in Pohnpeian, and the completed forms were collected at the end of the session. The cadre member and the local support team then established a school visitation schedule. Outer island school administrators did not attend this meeting; however, they were surveyed by the local support team on each island.

In order to conduct the teacher survey, the local support team visited the selected schools, administered the survey during one session at each school, and collected the completed surveys. Instructions were given in Pohnpeian.

The data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys, and for PREL representatives to monitor the status of returned surveys. Surveys were collected by the local support team

after being completed by each school's teachers and administrators. They were then forwarded to PREL in Honolulu for data entry and preliminary analysis.

III. Findings

This section of the report features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in Pohnpei State. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in Pohnpei State were away from work, on average, a total of 11.98 days. School administrators were away from work, on average, a total of 19.15 days. Table 3 provides data on reasons why teachers were away from work and frequency of absence. Table 4 provides data on reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away from School in Pohnpei State

Rank	Reason	Average # of Days Away
1	Personal illness	3.48
2	Vacation	1.95
3	Funerals	1.49
4	Transportation problem	0.67
5	Administrative leave	0.57
6	Meetings and workshops	0.54
7	Child care	0.51
8	Family member sick	0.44
9	Storm, heavy rain, flood, etc.	0.36
10	Maternity leave	0.30
11	Church activities	0.28
12	Family responsibilities	0.23
13	Stress	0.22
14	Educational leave	0.17
15	Community responsibilities	0.15
16	Working conditions	0.12
17	Other	0.11
18	Training leave	0.07
19	Relationship with supervisors	0.06
19	Military training	0.06
20	Birthdays	0.05
20	Lack of instructional materials	0.05
21	Relationship with co-workers	0.04
22	Jury duty	0.03
22	Paternity leave	0.03
23	Suspension	0.00
23	Weddings	0.00
TOTAL		11.98

In Pohnpei State, personal illness was the leading cause of teachers being away from school, with an average of 3.48 days away. The next highest reason was vacation, with an average of 1.95 days; followed by funerals, with an average of 1.49 days; and transportation problems, with an average of .67 days.

Table 4
Reasons Why School Administrators Are Away from School in Pohnpei State

Rank	Reason	Average # of Days Away
1	Vacation	4.63
2	Meetings and workshops	4.33
3	Funerals	2.70
3	Personal illness	2.70
4	Family member sick	1.40
5	Church activities	0.60
6	Community responsibilities	0.40
6	Training leave	0.40
7	Family responsibilities	0.33
8	Administrative leave	0.30
9	Child care	0.23
10	Stress	0.20
11	Other	0.17
12	Maternity leave	0.13
12	Storm, heavy rain, flood, etc.	0.13
13	Lack of instructional materials	0.10
13	Relationship with co-workers	0.10
14	Birthdays	0.07
14	Relationship with supervisors	0.07
14	Transportation problem	0.07
15	Educational leave	0.03
15	Paternity leave	0.03
15	Working conditions	0.03
16	Jury duty	0.00
16	Military training	0.00
16	Suspension	0.00
16	Weddings	0.00
TOTAL		19.15

In Pohnpei State, school administrators were most frequently away from school due to vacation, averaging 4.63 days. This was followed by meetings and workshops, with an average of 4.33 days. In a tie for third, funerals and personal illness averaged 2.70 days each.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was collapsed into two categories: "strongly disagree" and "disagree" were counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In Pohnpei State, 30.73 percent (N=55) of the surveyed teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

For both Potential Leavers and Non-Leavers, the number one reason for leaving teaching was low salaries. Also included in the top five by both groups were poor working conditions, no support from school administration, and no support from central office.

Table 5
Reasons for Leaving Teaching in Pohnpei State

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	73.6	5	61.5	5
no support from school administration	83.0	3	68.3	4
no support from central office	80.4	4	69.1	3
too much stress	60.4	7	53.8	7
poor relationship with parents	46.3	11	37.5	11
students' bad attitudes **	46.3	11	18.0	17
my lack of control over school policies	33.3	15	26.6	15
poor benefits *	70.4	6	48.8	10
personal health problems *	34.6	14	54.4	6
too many disagreements about how to teach	43.6	12	35.0	13
not enough school materials and supplies **	83.3	2	52.5	8
low salaries *	90.9	1	76.5	1
too many responsibilities **	58.5	8	30.0	14
pressure from the community	37.0	13	36.4	12
retirement *	53.7	9	72.8	2
promotion	47.3	10	51.9	9
poor relationship with other teachers	24.1	16	20.3	16

* $p \leq .05$
** $p \leq .01$

For each possible reason for leaving teaching, a statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different. Potential Leavers are more likely to leave for the following reasons: students' bad attitudes, poor benefits, not enough school materials and supplies, low salaries, and too many responsibilities. They are less likely than Non-Leavers to leave for reasons related to personal health problems and retirement.

In Pohnpei State, 20 percent ($N=6$) of the surveyed school administrators agreed that they might leave educational administration within the next two years. Table 6 ranks the reasons school administrators gave for leaving the school administration field, and compares Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

There are many reasons why Potential Leavers might leave school administration (see rankings in Table 6). For each possible reason for leaving school administration, a statistical test (χ^2) was performed to determine if response patterns of

Potential Leavers and Non-Leavers are different. The results indicated that school administrators were more likely to leave because of low salaries.

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave education was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A high degree of burnout is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A medium degree of burnout is reflected in moderate scores on the three subscales.
3. A low degree of burnout is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 6
Reasons for Leaving Administration in Pohnpei State

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	66.7	3	63.2	5
no support from school staff	50.0	5	66.7	3
no support from central office administration	83.3	2	76.2	2
too much stress	66.7	3	76.2	2
poor relationships with parents	50.0	5	42.9	11
students' bad attitudes	16.7	7	19.0	15
my lack of control over school policies	50.0	5	23.8	14
poor benefits	60.0	4	61.9	6
personal health problems	50.0	5	65.0	4
too many disagreements about how to run my school	33.3	6	57.1	7
not enough school materials and supplies	66.7	3	38.1	12
low salaries *	100.0	1	50.0	10
too many responsibilities	66.7	3	55.0	8
pressure from the community	33.3	6	52.4	9
retirement	50.0	5	80.0	1
promotion	33.3	6	65.0	4
poor relationship with teachers	33.3	6	35.0	13
poor relationship with staff	33.3	6	35.0	13
political reasons	16.7	7	50.0	10

* $p \leq .05$

** $p \leq .01$

Table 7 reflects a comparison of scores from the norm sample with mean scores for all Pohnpeiian teacher and school administrator respondents. Teachers in Pohnpei State express a higher sense of personal accomplishment than both school administrators and the norm sample. In addition, they are neither as emotionally exhausted nor as depersonalized as the norm group. On the contrary, they report a higher degree of engagement with work than educators included in the norm sample.

School administrators, on the other hand, experience a lower sense of personal accomplishment compared to both Pohnpei's teachers and the norm sample. However, like the teachers in this sample, they are less emotionally exhausted, and have a lower sense of depersonalization than the norm group. Occupational burnout does not appear to be a problem for most teachers or school administrators in Pohnpei State.

Table 7
MBI Subscale Scores for Pohnpei State Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size*	Mean Score
Personal Accomplishment (PA)		
Pohnpei State Teachers	179	35.3
Pohnpei State School Administrators	28	30.8
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Pohnpei State Teachers	179	19.3
Pohnpei State School Administrators	27	18.1
Norm Sample	4,163	21.3
Depersonalization (DP)		
Pohnpei State Teachers	179	7.0
Pohnpei State School Administrators	27	8.1
Norm Sample	4,163	11.0

*Sample sizes vary due to non-responses.

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified as High, Moderate, or Low. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to

the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high lack of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. For both teachers and school administrators, the patterns are the same. Those who may leave are less likely to feel a high sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized than those who plan to stay. Both teachers and school administrators who plan to leave appear to experience more occupational burnout than their non-leaving peers.

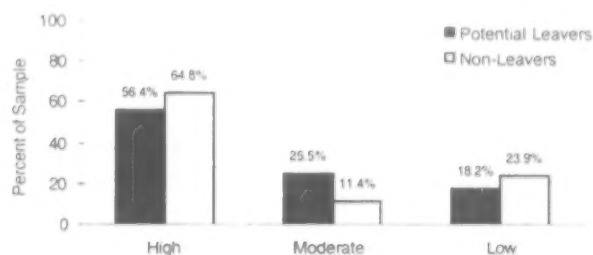


Figure 1. **Personal accomplishment among teachers in Pohnpei State**

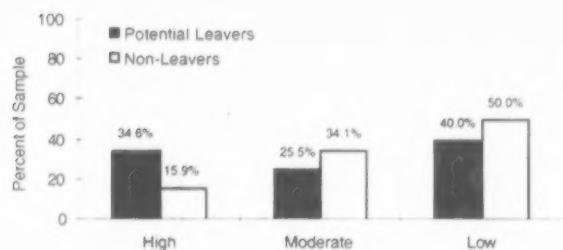


Figure 2. Emotional exhaustion among teachers in Pohnpei State

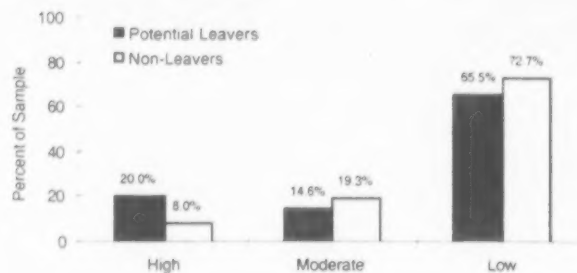


Figure 3. Depersonalization among teachers in Pohnpei State

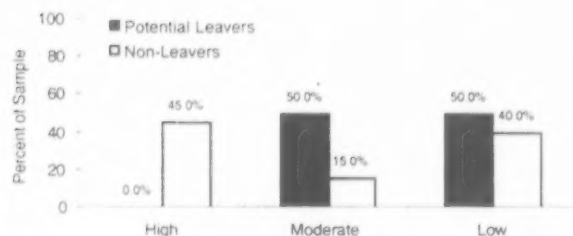


Figure 4. Personal accomplishment among school administrators in Pohnpei State

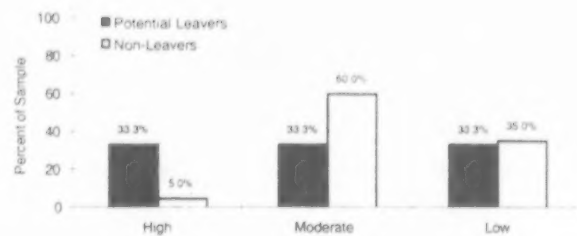


Figure 5. Emotional exhaustion among school administrators in Pohnpei State

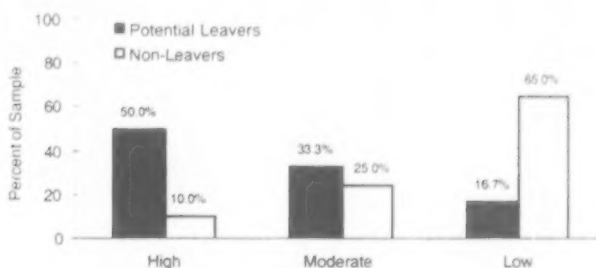


Figure 6. Depersonalization among school administrators in Pohnpei State

IV. Discussion

Absenteeism

It appears that absenteeism among teachers and school administrators in Pohnpei State is a problem. The average numbers of absences for teachers (11.98) and school administrators (19.15) are among the highest in the region.

Personal illness, vacations, and funerals were

cited as the leading causes for teachers to be away from school. Immediate obligations or concerns, such as illness and funerals, are cited in the research literature as reasons for absenteeism (Scott & Wimbush, 1991), but the high number of days away due to vacation is of some concern.

Why are teachers taking vacation during the school year?

The top reasons for school administrators to be away from school are vacation, meetings and workshops, funerals, and personal illness. Vacation was cited as the number one reason, with an average of 4.63 days away. This causes some concern. A careful review of the raw data showed that two respondents marked two months (40+ days) away from school for vacation. Personnel and fiscal policies in Pohnpei State require that teachers and school administrators take leave for two months during the summer. These respondents were probably referring to this break when they filled out the survey. As a result, the data might be skewed. Re-analysis of school administrator data that excludes these two respondents results in an average of 1.30 days away due to vacation.

Attrition

More than 30 percent of surveyed Pohnpei teachers reported that they might leave their profession within two years. This is the highest attrition rate across all entities in the region. Low salaries and lack of administrative support are concerns of all teachers, but those who say they might leave cite the following additional reasons: students' bad attitudes, poor benefits, not enough school materials and supplies, and too many responsibilities.

Problems associated with student behavior and classroom management are frequent concerns in Pohnpei State. Teachers' perceptions of poor student attitudes and disruptive behavior can generate frustration and negative attitudes towards these students, creating a cycle of negative interaction. This, along with lack of funding for education,

could cause teachers to look elsewhere for employment.

Twenty percent of school administrators surveyed reported that they might leave their profession within two years. Many reasons for leaving were cited, but Potential Leavers are more likely to leave due to low salaries. With diminished funds for education as a result of the Compact of Free Association step-down, many school administrators might feel that they are more likely to find higher-paying jobs in another field.

Burnout

Teachers in Pohnpei State, in general, experience less burnout than their U.S. Mainland counterparts. They exhibit a higher sense of personal accomplishment than both school administrators and the norm sample. In addition, they have low levels of emotional exhaustion and depersonalization. School administrators, in general, experience a lower sense of personal accomplishment than teachers. Perhaps teachers see evidence of student progress on a regular basis and therefore feel more effective. School administrators, on the other hand, are more distanced from direct instruction and are less able to see progress as readily. As a result, they might not have a strong feeling of success.

Teachers and school administrators who plan to leave within the next two years experience more burnout than those who plan to stay. These Potential Leavers experience a lower sense of personal accomplishment, are more emotionally exhausted, and feel depersonalized. They appear to experience all aspects of burnout. The extremely high attrition rate among Pohnpei's teachers might be related to this occupational burnout.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of its results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;
- in many cases, administered surveys in group settings, leading respondents through each item and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their

responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight

tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.
2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents might leave and reasons that *might* cause them to leave, perhaps asking whether or not they were going to leave and *why* would have provided more definitive information.
3. Survey directions could have clearly told respondents to exclude official school vacations from responses to questions regarding the number of days away.
4. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

VI. Recommendations

The recommendations provided in this section of the report are based on general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in Pohnpei State. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profes-

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

sion, and (3) comparison of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

Absenteeism among teachers and school administrators in Pohnpei State appears to be a

problem. Teachers were away from work for an average of 11.98 days. School administrators were away from work for an average of 19.15 days. These absenteeism rates are among the highest in the region. Although the reasons stated—personal illness, vacations, and meetings and workshops—might be valid, the very high rates of absenteeism for both teachers and school administrators are problematic. It is therefore recommended that improving the attendance of educators in Pohnpei State be given serious consideration. Existing policies on attendance should be reviewed for appropriate action. In the absence of existing attendance policies, written policies should be developed, consistently implemented, and enforced through an appropriate accountability system that includes sanctions and rewards. For children to make academic progress, they need the guidance and leadership of their teachers and school administrators; these educators provide necessary and important instruction and also serve as role models.

Recommendations Regarding Findings on Attrition

More than 30 percent of Pohnpei State's surveyed teachers might leave their profession within two years. This is the highest attrition rate across

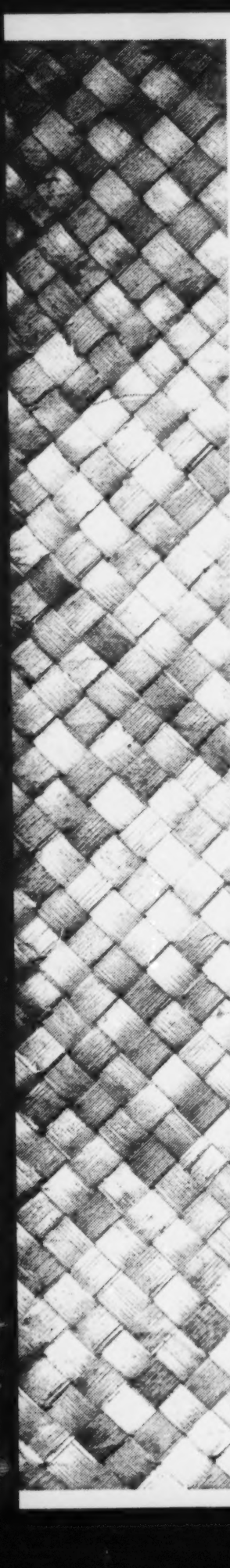
all entities in the region. The top reasons for leaving include students' bad attitudes, poor benefits, not enough school materials and supplies, and too many responsibilities. To contribute to staff stability, a pro-active program that will reduce the attrition rate of teachers and school administrators should be designed and implemented by the public school system. Staff stability, in turn, could contribute to better student performance and achievement.

Recommendations Regarding Findings on Stress/Burnout

Although burnout is not a problem for teachers and school administrators who choose to remain in education, those teachers and school administrators who may leave within the next two years experience a lower sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized. For those who plan to leave, occupational burnout appears to be a problem. It is therefore recommended that, in order to retain these educators, the public school system develop a comprehensive program to reduce stress and burnout. This might improve the attendance and well being of those professionals who work most closely with students.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, Volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



RETENTION AND ATTRITION OF PACIFIC SCHOOL TEACHERS AND ADMINISTRATORS (RAPSTA) STUDY

Yap State, Federated States of Micronesia

Research and Development Cadre

June 1998



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street ■ 25th Floor ■ Honolulu, Hawai'i 96813

Tel: 808.441.1300 ■ FAX: 808.441.1385 ■ E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

Table of Contents

Acknowledgments	10-iii
Preface	10-iv
I. Introduction	10-1
II. Methods	10-3
III. Findings	10-7
IV. Discussion	10-11
V. Limitations	10-12
VI. Recommendations	10-14
References	10-15

List of Tables

1. Characteristics of RAPSTA Teacher Sample from Yap State	10-4
2. Characteristics of RAPSTA School Administrator Sample from Yap State	10-4
3. Reasons Why Teachers Are Away from School in Yap State	10-7
4. Reasons Why School Administrators Are Away from School in Yap State	10-7
5. Reasons for Leaving Teaching in Yap State	10-8
6. Reasons for Leaving School Administration in Yap State	10-9
7. MBI Subscale Mean Scores for Yap State Teachers and School Administrators Compared to the Norm Sample	10-9
8. Cut-Off Scores for MBI Subscale Categories	10-10

List of Figures

1. Personal accomplishment among teachers in Yap State	10-10
2. Emotional exhaustion among teachers in Yap State	10-10
3. Depersonalization among teachers in Yap State	10-10
4. Personal accomplishment among school administrators in Yap State	10-11
5. Emotional exhaustion among school administrators in Yap State	10-11
6. Depersonalization among school administrators in Yap State	10-11

Acknowledgments

This study could not have been completed without the support of departments and ministries of education in the Pacific region, the Research and Development (R&D) Cadre members, and their local R&D support teams. Contributions of time and resources in this cost-shared activity increased work responsibilities and strained small budgets. Pacific Resources for Education and Learning (PREL) staff who worked on this study—Zoe Ann Brown, Jennifer Crites, Stan Koki, Larissa Leroux, Rodrigo Mauricio, Denise Onikama, Carol Perry, Liane Sing, and Kyaw Soe—are grateful to R&D Cadre members for their commitment to the work, and for the continuing support of the region's chief state school officers and the education chief of the FSM National Government.

PREL particularly appreciates the work of R&D Cadre member Timothy Mo'on, Yap Department of Education, for his guidance and leadership in carrying out this research in Yap State. His efforts, along with those of the Yap State local R&D support team—Pius Talimeisei, Melissa Mendoca, Fidelia Adgil, Gilmoon, and Ferdinand Samot—made this study possible.

- PREL R&D Cadre Members, 1996-1998

Fauma Seui	American Samoa
Sina Peau Ward	American Samoa
Peter James	Chuuk State, FSM
Eric Marar	Chuuk State, FSM
Jean Olopai	Commonwealth of the Northern Mariana Islands
Burnis Danis	Federated States of Micronesia (FSM)
Nerissa Bretania-Shafer	Guam
Leilani Nishimura	Guam
Michael Heim	Hawai'i
Winton Clarence	Kosrae State, FSM
Marilyn Kabua	Republic of the Marshall Islands
Edwel Ongrung	Republic of Palau
Masaharu Tmodrang	Republic of Palau
Hanover Ehsa	Pohnpei State, FSM
Timothy Mo'on	Yap State, FSM

Preface

This study represents one step towards solving problems that plague many schools throughout the Pacific: high rates of absenteeism, attrition, and stress/burnout among teachers and school administrators. The data collected in this study reveal the extent of these problems and shed some light on possible contributing factors.

During coming months, R&D Cadre members will present this report to teachers and school administrators in each Pacific entity, soliciting feedback and suggestions that we anticipate will lead to the formulation of specific, entity-based solutions to these concerns.

I. Introduction

The mission of Pacific Resources for Education and Learning (PREL) is to *assist education, government, community agencies, businesses, and labor groups to maintain cultural literacy and improve the quality of life by helping to strengthen educational programs and processes for children, youth, and adults* (Pacific Resources for Education and Learning, 1996).

In order to carry out this mission, PREL has made a commitment to work in close partnership with the ten American-affiliated Pacific entities: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. As a result of their very different forms of political affiliation with the United States, these ten states are referred to as *entities* in PREL's terminology.

As part of this work, PREL's Research and Development (R&D) Cadre has undertaken several studies in order to describe the educational experiences and opportunities of Pacific Islanders. The R&D Cadre is a group of Pacific educators consisting of one member from each department or ministry of education in the ten entities comprising PREL's service region, and one member representing the National Department of Education, Federated States of Micronesia.

Each entity has formed a local support team of researchers who assist the cadre member in carrying out research studies. The local R&D support teams range in size from five to thirteen members.

One of the studies conducted, *A Study of Risk Factors Among High School Students in the Pacific Region* (Pacific Region Educational Laboratory R&D Cadre, 1995), sparked interest in examining risk factors associated with adults working in Pacific schools. Open-ended questions answered by students participating in the 1995 study indicated that these students were concerned about teacher absenteeism. In entities where no substitute teacher pool is available, students' edu-

cational opportunities may be seriously compromised due to high rates of teacher absenteeism.

Frequent teacher absenteeism in the Pacific may have a strong impact on student achievement. For various reasons, such as lack of funds or human resources, substitute-teacher programs are lacking in many entities. Students might come to school, but a teacher might not be available to teach them. Not only does this affect access to educational opportunities and contribute to low student achievement, it could also have an effect on attendance counts, which can adversely affect school funding, thus perpetuating a negative cycle.

Factors related to teacher and school administrator absenteeism have been identified in research conducted in American schools. However, similar research is lacking for the Pacific region. As a result, the PREL Board of Directors recommended follow-up research detailing risk factors for teachers and school administrators. This recommendation was supported by the R&D Cadre members, who expressed interest in examining these risk factors within their respective entities. In addition, policy makers and program managers in the ten entities have expressed concern about the impact of teacher and administrator absenteeism, as well as attrition and stress/burnout, on student achievement.

In response to these concerns, a study was designed to describe the factors that affect Pacific Island educators and make them "at risk" for absenteeism, attrition, and stress/burnout. Merriam-Webster's Collegiate Dictionary (1997) defines stress as "a physical, chemical, or emotional factor that causes bodily and mental tension." Research indicates that excessive stress might cause illness.

A condition termed "burnout" (DeRobbio, 1995) could also result from difficult and stressful work conditions. Merriam-Webster's Collegiate Dictionary defines this condition as "exhaustion of physical or emotional strength."

This study was guided by the following research questions:

- 1) What are the risk factors that affect Pacific school teachers and administrators?
- 2) What risk factors lead to absenteeism, attrition, and stress/burnout?

The RAPSTA study comes at a time when the Yap Department of Education is examining its programs and structure. Of particular interest to Yap State is the need to develop school improvement strategies, such as determining ways to increase teacher and administrator preparation, within the context of Yap culture.

This study was designed to identify risk factors affecting educators in Yap State and other Pacific entities served by PREL. As part of the process, a literature review of teacher risk factors was performed and published (Hammond & Onikama, 1997). This review concluded that:

- 1) Factors associated with teacher absenteeism—such as child care, transportation difficulties, illness, and cultural demands—tend to be immediate obligations or concerns (Scott & Wimbush, 1991).
- 2) Factors associated with attrition—such as low salaries, poor benefits, and work overload—are chronic or habitual concerns (Wari, 1993).
- 3) Factors associated with stress/burnout—such as student misbehavior (Holmes & Rahe, 1967; Pelletier, 1977; American Psychiatric Association, 1994); anger, anxiety, or depression (DeRobbio & Iwanicki, 1996); and school reform (Farber & Ascher, 1992)—are daily nuisances.

These risk factors might also play a role in teacher and school administrator absenteeism, attrition, and stress/burnout in the Pacific region

with its unique educational, cultural, and geographical contexts. Pacific schools have adopted the American system of education. However, this transplanted system exists parallel to a Pacific orientation and heritage influenced by Polynesian and Micronesian traditional values, cultural events, and environmental circumstances. Some examples include the following, which were taken from a review of the literature and interviews with Pacific educators:

Cultural events. In some island communities, traditional feasts and funerals are important parts of village life. For instance, if a feast falls on a school day, it is likely that the teacher (who may hold a traditional title) will not go to school, but will prepare for the event. Family relationships with their attendant obligations are highly valued and honored among Pacific Islanders and may account for higher absenteeism rates among Pacific educators.

Family and village social roles. In many island communities, family and village relationships provide a social context that may overlook frequent absenteeism. For example, a teacher may be a member of a large and influential family, many of whom may be employed in the public school system. That teacher's absenteeism may, therefore, be overlooked. Although the traditional American ethic views such favoritism as inappropriate, it may be tolerated within the context of many Pacific lifestyles.

Culturally sanctioned time off. Culturally sanctioned time off may be granted to some people in some entities. One example is referred to as "Monday sickness," in which male teachers, especially those who are young and single, are absent from school after a weekend of excess. Their absence is tolerated as a social and developmental pattern related to their youth.

Environmental factors. Unique weather patterns such as hurricanes and "super-typhoons" in the Pacific region may have an effect on absenteeism. Typhoon Paka, for example, recently decimated Guam, leaving it without electricity and forcing the closure of schools. In Hawai'i, giant winter swells may close roadways and limit access to schools. Flooding in low-lying islands and atolls can cause many teachers to miss school for one or more days.

The main purpose of this study was to raise awareness of risk factors affecting educators in the Pacific entities and to provide insight necessary to address the concerns of students, policy makers, and educators throughout the region. Hopefully, the results will stimulate interest and follow-up action as it relates to local professional development opportunities for Pacific educators.

Because of the region's remote geographical location and its distance from educator training programs, as well as the high costs associated with traveling to institutions of higher education, local departments of education must share responsibility for the development of programs or interventions geared towards maintaining the educational work force. Preventing the negative outcomes associated with risk factors can help educators to become more effective while working with their students and thus promote positive student outcomes. The study will also contribute to the fund of knowledge on absenteeism, attrition, and stress/burnout among educators generally, and Pacific educators specifically, thereby contributing to cross-cultural theory building. This, in turn, may assist the development of models and tools for promoting retention and reducing attrition and stress/burnout among educators in the Pacific and elsewhere.

II. Methods

The *Retention and Attrition of Pacific School Teachers and Administrators* (RAPSTA) study was conducted in ten American-affiliated Pacific entities during the spring of 1997. It was designed and conducted by PREL's R&D Cadre and its members' local support teams. PREL staff provided technical assistance.

R&D Cadre members participated in three PREL-sponsored seminars where they acquired tools enabling them to design the study, develop data collection instruments, and analyze the data. Cadre members shared information and ideas from the seminars with their local R&D support team.

Subjects

The unit of analysis for this study is the elementary and secondary-level teacher and school administrator. Yap DOE wanted to survey its entire teacher and school administrator population. Two hundred and ninety-nine teacher surveys were distributed, and 189 completed surveys were returned, resulting in a 63 percent response rate. Thirty-four school administrator surveys were distributed, and 26 completed surveys were returned, resulting in a 76 percent response rate. Tables 1 and 2 summarize demographic characteristics of the subjects.

Table 1
Characteristics of RAPSTA Teacher Sample
from Yap State

Demographic Characteristics		Number	Percentage
Gender	Female	68	36.0
	Male	106	56.1
	No Response	15	7.9
	TOTAL	189	100.0
Ethnicity	Caucasian	6	3.2
	Filipino	8	4.2
	Palauan	3	1.6
	Ulithian	20	10.6
	Woleaian	33	17.5
	Yapese	95	50.3
	Mixed Micronesian	5	2.6
	Other	2	1.1
	No Response	17	9.0
	TOTAL	189	100.0
Age	20-29	36	19.0
	30-39	62	32.8
	40-49	64	33.9
	50+	22	11.6
	No Response	5	2.6
	TOTAL	189	100.0
Marital Status	Never Married	40	21.2
	Married	125	66.1
	Separated	5	2.6
	Divorced	4	2.1
	Widowed	7	3.7
	No Response	8	4.2
	TOTAL	189	100.0
Education	HS Graduate	80	42.3
	Associate Degree	64	33.9
	Bachelor's Degree	17	9.0
	Master's Degree	8	4.2
	Other	7	3.7
	No Response	13	6.9
	TOTAL	189	100.0
Experience	1 - 4 Years	51	27.0
	5 - 10 Years	50	26.5
	11 - 14 Years	19	10.1
	15 - 20 Years	30	15.9
	20+ Years	28	14.8
	No Response	11	5.8
	TOTAL	189	100.0
Salary	<4,000	58	30.7
	4,000-4,999	12	6.3
	5,000-5,999	38	20.1
	6,000-6,999	40	21.2
	7,000-7,999	8	4.2
	8,000+	10	5.3
	No Response	23	12.2
	TOTAL	189	100.0

Table 2
Characteristics of RAPSTA School
Administrator Sample from Yap State

Demographic Characteristics		Number	Percentage
Gender	Female	3	11.5
	Male	22	84.6
	No Response	1	3.8
	TOTAL	26	100.0
Ethnicity	Carolinian	1	3.8
	Palauan	2	7.7
	Satawalese	1	3.8
	Ulithian	3	11.5
	Woleaian	4	15.4
	Yapese	12	46.2
	Other	1	3.8
	No Response	2	7.7
	TOTAL	26	100.0
Age	35-39	6	23.1
	40-44	4	15.4
	45-49	10	38.5
	50+	5	19.2
	No Response	1	3.8
	TOTAL	26	100.0
Marital Status	Never Married	6	23.1
	Married	16	61.5
	Separated	1	3.8
	Divorced	0	0.0
	Widowed	3	11.5
	No Response	0	0.0
	TOTAL	26	100.0
Education	HS Graduate	4	15.4
	Associate Degree	11	42.3
	Bachelor's Degree	8	30.8
	Master's Degree	1	3.8
	Other	2	7.7
	No Response	0	0.0
	TOTAL	26	100.0
Experience	1 - 4 Years	5	19.2
	5 - 10 Years	2	7.7
	11 - 14 Years	1	3.8
	15 - 20 Years	6	23.1
	20+ Years	12	46.2
	No Response	0	0.0
	TOTAL	26	100.0
Salary	5,000-5,999	6	23.1
	6,000-6,999	8	30.8
	7,000-7,999	1	3.8
	8,000+	10	38.5
	No Response	1	3.8
	TOTAL	26	100.0

The majority of teachers are married Yapese males, between the ages of 30 and 49 years, with either a high school diploma (42.3%) or an associate degree (33.9%) and one to ten years of teaching experience.

Most school administrators are married Yapese males, between the ages of 45 and 49 years, with either an associate degree (42.3%) or a bachelor's degree (30.8%), and more than 15 years of experience.

Sampling

204

Because the Yap DOE wanted the study to include the entire teacher and administrator population, all 26 schools in Yap State were surveyed: 12 from Yap Island Proper, and 14 from the neighboring islands. The data set includes 112 teachers and 14 school administrators from Yap Proper, and 77 teachers and 12 school administrators from the neighboring islands.

Instrumentation

Two similar data collection instruments were developed, one for teachers and another for school administrators (see Appendices). Each is a five-page survey with three sections: Section 1 consists of 2-1/2 pages of forced-choice and short-answer, self-reported background information as well as absenteeism data for the school year in which the survey was administered. Section 2 is a single-page rating sheet outlining stress/burnout feelings; it was adapted from the Maslach Burnout Inventory-Educators Survey and Human Services Survey (Maslach, Jackson, & Leiter, 1996). Section 3 is also a single-page rating sheet detailing reasons why an educator might quit teaching or working as a school administrator. Individuals did not identify themselves by name, and all responses were kept confidential.

Section 1 - Demographic Characteristics and Absenteeism Data

Section 1 gathered relevant personal information to be used in examining teacher/school administrator retention and attrition. Questions asked about gender, age, ethnicity, marital status, educational attainment, salary, experience, and current teaching load. Additional data on the number of instructional days away from school during the 1996-1997 school year (SY) and the reasons for those absences were collected. For example, participants were asked to write down the number of days they were away from school in SY 1996-1997 for reasons such as funerals, birthdays, storms, heavy rains, or floods.

Section 2 - Stress and Burnout Ratings

The purpose of Section 2, as a means of measuring employee stress/burnout, was to discover how respondents view their jobs and the people with whom they work closely. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. "It is the best known and most widely used questionnaire for the assessment of individual occupational burnout among human service workers and others whose work involves intense interaction with people" (Offerman, 1986, p. 419). The MBI is a 22-item, self-report inventory of three subscales, which were developed to measure dimensions that the authors felt best defined burnout. These subscales include Low Personal Accomplishment (8 items), Emotional Exhaustion (9 items), and Depersonalization (5 items).

- Low Personal Accomplishment results when teachers evaluate themselves negatively, particularly in relation to their work with students (DeRobbio, 1995). Those who report low personal accomplishment may disagree with the statement, "I have accomplished many worthwhile things in teaching" (Maslach, Jackson, & Schwab, 1986, p. 2).
- Emotional Exhaustion "is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, educators find they can no longer give of themselves to students as they once could" (Maslach, Jackson, & Leiter, 1996, p. 28). They may agree with the statement, "I feel I'm working too hard on my job" (Maslach & Jackson, 1986, p. 2).
- Depersonalization results when educators "no longer have positive feelings about their students" (Maslach, Jackson, & Leiter, 1996, p. 28). They may develop

negative or cynical attitudes and feelings about them and may agree with the statement, "I don't really care what happens to some of my students" (Maslach, Jackson, & Schwab, 1986, p. 2).

Respondents rated each of the 22 items in terms of the frequency that these feelings occur, ranging from "never" (0) to "every day" (6).

To make the survey instrument more appropriate to the Pacific region, the MBI Educators Survey (Maslach, Jackson, & Schwab, 1986) and the MBI Human Services Survey (Maslach & Jackson, 1986) were adapted, with permission from the publisher. Seven of the 22 items were modified to clarify vocabulary and idiomatic phrases. Since many of the respondents in the Pacific entities speak English as a second or foreign language, words such as "exhilarated" and "callous," or expressions such as "at the end of my rope" were stated in more understandable terms. These modifications were made by two Pacific-entity educators who are familiar with the English proficiency of teachers in the region. It was determined that these language-clarifying changes would not significantly alter the instrument's technical qualities. The MBI has been validated for use in countries around the world in a number of translations (Maslach, Jackson, & Leiter, 1996, p. 1).

Section 3 - Reasons for Leaving the Profession

The purpose of Section 3 was to understand why teachers and school administrators leave their jobs. Respondents were asked to rate each of 19 statements on a four-point Likert-type scale from "strongly disagree" to "strongly agree." For example, teachers rated their level of agreement with two statements: "I might leave my current teaching job for a better teaching position within the next two years" and "I might leave teaching altogether within the next two years." They were also asked to rate their agreement by noting reasons why they might quit teaching. Reasons for leaving

the profession, as listed on the survey, were selected because of their prevalence in attrition literature. Additional reasons were included on the basis of their perceived importance by educators in the Pacific region.

Procedures

The R&D Cadre members and their local support teams coordinated the survey administration. They planned meetings to inform school staff about the RAPSTA study, its purpose, rationale for the selection of schools, and the importance of serious responses to the survey. In these meetings, schedules for data collection were developed and confirmed. Plans for necessary logistical support and accommodations were also communicated to the staff.

The local support team members and volunteers from the DOE central office visited the schools and met with teachers in a group setting to explain the RAPSTA study. Teachers filled out the questionnaires for collection at the end of the session.

The data were collected from April 1997 to June 1997, giving adequate time for personnel to complete the surveys and time for PREL representatives to follow up on the status of returned surveys. Surveys were collected by the local support team after being completed by each school's teachers and administrators. They were then forwarded to PREL in Honolulu for data entry and preliminary analysis.

An important part of the procedure was the administration of the survey instruments, which were distributed on Yap Proper by an R & D Cadre member, a DOE staff member, and an educational specialist. On the neighboring islands, the surveying procedure was handled by other DOE personnel. At each school, the survey administrator met with teachers to explain the questionnaire and ensure that teachers took their responses to the survey seriously.

III. Findings

This section features general findings on absenteeism, attrition, and stress/burnout among teachers and school administrators in Yap State. It highlights findings in three areas: (1) reasons for school absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers with Non-Leavers.

Reasons for School Absences

During the 1996-1997 school year, teachers in Yap State were away from work, on average, a total of 15.08 days. School administrators were away from work, on average, a total of 20.25 days. Table 3 provides data on reasons why teachers were away from work and frequency of absence. Table 4 provides data on reasons why school administrators were away from work and frequency of absence.

Table 3
Reasons Why Teachers Are Away From School in Yap State

Rank	Reason	Average # of Days Away
1	Educational leave	2.75
2	Personal illness	2.19
3	Funerals	1.68
4	Family member sick	1.32
5	Meetings and workshops	1.18
6	Child care	1.14
7	Maternity leave	1.11
8	Storm, heavy rain, flood, etc.	0.98
9	Vacation	0.79
10	Community responsibilities	0.42
11	Family responsibilities	0.28
12	Other	0.18
13	Stress	0.14
14	Lack of instructional materials	0.13
14	Transportation problem	0.13
15	Administrative leave	0.12
15	Training leave	0.12
16	Working conditions	0.11
17	Relationship with supervisors	0.10
18	Suspension	0.08
19	Church activities	0.05
20	Paternity leave	0.03
20	Birthdays	0.03
21	Relationship with co-workers	0.01
21	Weddings	0.01
22	Jury duty	0.00
22	Military training	0.00
TOTAL		15.08

In Yap State, educational leave was the leading cause of teachers being away from school, with 2.75 days away. The next highest reason was personal illness, with an average of 2.19 days; followed by funerals, with an average of 1.68 days.

Table 4
Reasons Why School Administrators Are Away From School in Yap State

Rank	Reason	Average # of Days Away
1	Meetings and workshops	5.73
2	Family member sick	5.58
3	Personal illness	2.35
4	Educational leave	2.12
5	Funerals	1.62
6	Storm, heavy rain, flood, etc.	0.89
7	Vacation	0.69
8	Family responsibilities	0.54
9	Community responsibilities	0.23
9	Training leave	0.23
10	Administrative leave	0.19
11	Church activities	0.08
12	Birthdays	0.00
12	Child care	0.00
12	Jury duty	0.00
12	Lack of instructional materials	0.00
12	Maternity leave	0.00
12	Military training	0.00
12	Other	0.00
12	Paternity leave	0.00
12	Relationship with co-workers	0.00
12	Relationship with supervisors	0.00
12	Stress	0.00
12	Suspension	0.00
12	Transportation problem	0.00
12	Weddings	0.00
12	Working conditions	0.00
TOTAL		20.25

The top reasons for Yap State school administrators being away from school were meetings and workshops, with an average of 5.73 days; sickness in the family, with an average of 5.58 days; and personal illness, with an average of 2.35 days.

Reasons for Attrition in the Education Profession

Respondents rated 17 reasons for leaving teaching or administration on a four-point Likert-type scale from "strongly agree" to "strongly disagree." In order to judge the technical significance of correlations between responses on each item, this ordinal scale was then collapsed into two categories: "strongly disagree" and "disagree" were

counted as DISAGREE; "strongly agree" and "agree" were counted as AGREE. Percentage of agreement was then calculated for each reason.

In Yap State, 16.93 percent (N=32) of all teachers agreed that they might leave teaching within the next two years. For purposes of analysis, two categories were created: Potential Leavers and Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave teaching within the next two years." Table 5 ranks the reasons teachers gave for leaving teaching, comparing Potential Leavers with Non-Leavers.

There are many reasons why Potential Leavers might leave teaching, and these reasons differentiate them from Non-Leavers (see rankings in Table 5). A statistical test (χ^2) was performed to determine if the response patterns of Potential Leavers and Non-Leavers are different when looking at each possible reason for leaving teaching. Potential Leavers are more likely to leave for the following reasons: too much stress, students' bad attitudes, lack of control over school policies, too many disagreements about how to teach, not enough materials and supplies, low salaries, too many responsibilities, and pressure from the community.

In Yap State, 19.2 percent (N=5) of all school administrators agreed that they might leave educational administration within the next two years (Potential Leavers). Table 6 ranks the reasons school administrators gave for leaving the school administration field, comparing Potential Leavers with Non-Leavers. Non-Leavers are those who disagreed with the statement, "I might leave educational administration altogether within the next two years."

Both Potential Leavers and Non-Leavers have similar rankings for many of the reasons (see rankings in Table 6). A statistical test (χ^2) was performed to find out if the response patterns of Potential Leavers and Non-Leavers are different when looking at each possible reason for leaving school administration. The only significant difference between the two groups is that Potential Leavers were found to be less likely to leave because of pressure from the community.

Table 5
Reasons for Leaving Teaching in Yap State

If I quit teaching, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	66.7	6	58.3	6
no support from school administration	72.4	4	62.3	5
no support from central office	75.9	3	63.5	4
too much stress **	70.0	5	39.8	10
poor relationships with parents	57.1	9	37.7	11
students' bad attitudes **	62.1	7	27.9	14
my lack of control over school policies **	62.1	7	26.7	16
poor benefits	59.3	8	48.1	8
personal health problems	55.2	10	68.3	1
too many disagreements about how to teach **	62.1	7	35.6	13
not enough school materials and supplies **	82.1	2	50.5	7
low salaries *	90.0	1	66.7	3
too many responsibilities **	70.0	5	27.2	15
pressure from the community **	75.9	3	48.1	8
retirement	51.7	11	67.0	2
promotion	51.7	11	41.5	9
poor relationship with other teachers	44.8	12	36.2	12

* $p \leq .05$

** $p \leq .01$

Table 6
Reasons for Leaving Administration in Yap State

If I quit being a school administrator, it would be because of ...	Potential Leavers		Non-Leavers	
	% Agree	Rank	% Agree	Rank
poor working conditions	66.7	3	50.0	5
no support from school staff	50.0	4	56.3	4
no support from central office administration	50.0	4	50.0	5
too much stress	0.0	8	31.3	9
poor relationships with parents	50.0	4	56.3	4
students' bad attitudes	0.0	8	18.8	12
my lack of control over school policies	0.0	8	12.5	13
poor benefits	20.0	7	37.5	8
personal health problems	80.0	1	56.3	4
too many disagreements about how to run my school	0.0	8	50.0	5
not enough school materials and supplies	25.0	6	25.0	10
low salaries	75.0	2	60.0	3
too many responsibilities	0.0	8	20.0	11
pressure from the community *	0.0	8	62.5	2
retirement	40.0	5	73.3	1
promotion	25.0	6	46.7	6
poor relationship with teachers	0.0	8	43.8	7
poor relationship with staff	0.0	8	43.8	7
political reasons	25.0	6	43.8	7

* $p \leq .05$

Comparison of Potential Leavers and Non-Leavers

The relationship between stress, burnout, and reported desire to leave education was examined in order to provide assistance to program managers and staff developers who work to improve school climate.

1. A high degree of burnout is reflected in high scores on the Emotional Exhaustion, and Depersonalization subscales, and in low scores on the Personal Accomplishment subscale.
2. A medium degree of burnout is reflected in average scores on the three subscales.
3. A low degree of burnout is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales, and in high scores on the Personal Accomplishment subscale.

Table 7 reflects a comparison of mean scores for all teacher and school administrator respondents, with scores from the norm sample. These

scores indicate that Yap State teachers' sense of personal accomplishment is about the same as the norm sample. However, they are less emotionally exhausted and do not feel as depersonalized as those in the norm group.

School administrators exhibit a lower sense of personal accomplishment, less emotional exhaustion, and less depersonalization than both the norm sample and the Yap teacher sample.

Table 7
MBI Subscale Mean Scores for Yap State Teachers and School Administrators Compared to the Norm Sample

MBI Subscale	Sample Size	Mean Score
Personal Accomplishment (PA)		
Yap State Teachers	189	33.2
Yap State School Administrators	26	31.8
Norm Sample	4,163	33.5
Emotional Exhaustion (EE)		
Yap State Teachers	189	16.5
Yap State School Administrators	26	16.1
Norm Sample	4,163	21.3
Depersonalization (DP)		
Yap State Teachers	189	5.5
Yap State School Administrators	26	4.8
Norm Sample	4,163	11.0

In order to analyze how Potential Leavers compare to Non-Leavers on the MBI subscales, scores were classified into High, Moderate, and Low categories. To make interpretation easier, the suggested cut-off scores used by MBI authors to classify low and high Personal Accomplishment were reversed. That is, a high score in this report means a high sense of personal accomplishment. According to the authors (Maslach, Jackson, & Leiter, 1996), personal accomplishment is a reverse scale, which means high scores denote a high lack of personal accomplishment. We found this to be confusing and, thus, made these changes for our reporting purposes. The following cut-off scores were used:

Table 8
Cut-Off Scores for MBI Subscale Categories

MBI Subscale	High	Moderate	Low
Personal Accomplishment	≥ 37	31-36	≤ 30
Emotional Exhaustion	≥ 27	17-26	≤ 16
Depersonalization	≥ 14	9-13	≤ 8

Figures 1-6 display differences between Potential Leavers and Non-Leavers among teachers (Figures 1-3) and school administrators (Figures 4-6) on the three MBI subscales. Teachers who might leave have a lower sense of personal accomplishment, are more emotionally exhausted, and feel more depersonalized than those who do not plan to leave.

On the other hand, school administrators who might leave experience a higher sense of personal accomplishment, are less emotionally exhausted, and feel less depersonalized than those who do not plan to leave.

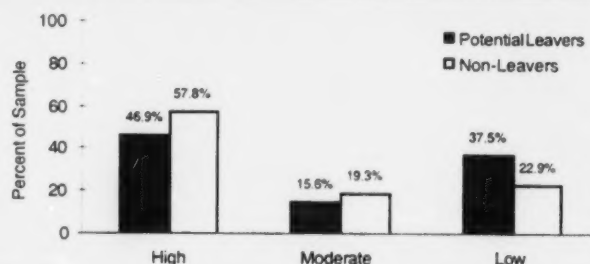


Figure 1. Personal accomplishment among teachers in Yap State

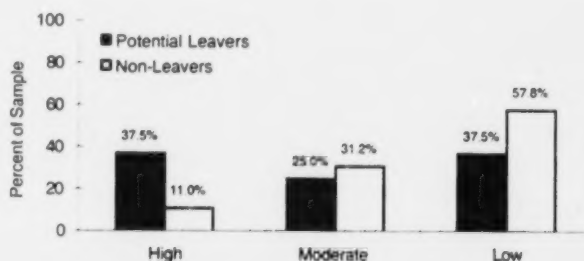


Figure 2. Emotional exhaustion among teachers in Yap State

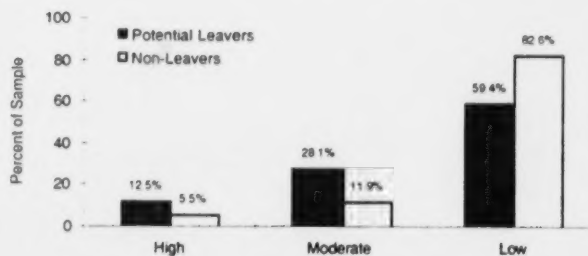


Figure 3. Depersonalization among teachers in Yap State

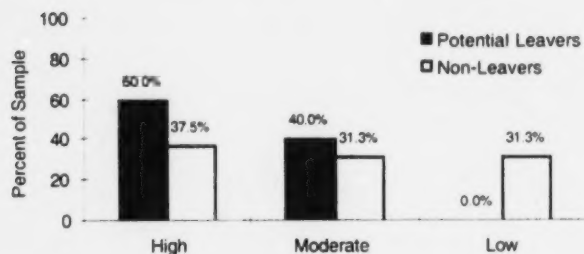


Figure 4. Personal accomplishment among school administrators in Yap State

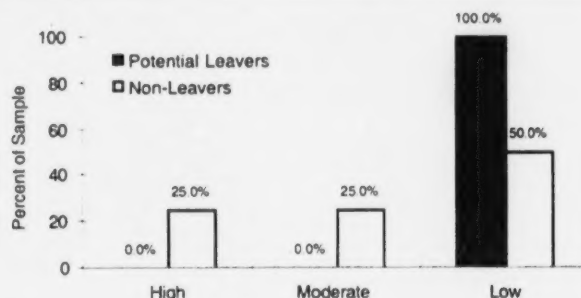


Figure 5. Emotional exhaustion among school administrators in Yap State

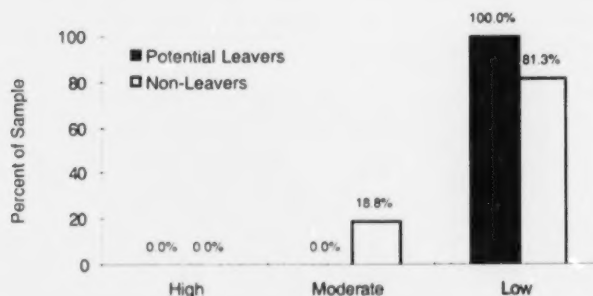


Figure 6. Depersonalization among school administrators in Yap State

IV. Discussion

Absenteeism

Absenteeism among teachers and school administrators in Yap State appears to be a problem. For example, teachers were away from work, on average, a total of 15.08 days. School administrators were away from work, on average, a total of 20.25 days. These rates of absenteeism are among the highest in the region. Absences for teachers and school administrators are due to many reasons, including personal illness and funerals, which were cited by Scott & Wimbush (1991) as immediate obligations or concerns. However, the most common reasons why teachers and school administrators are away from school include educational leave, and meetings and workshops. Although these could be considered valid reasons, the high absenteeism rates for both teach-

ers and school administrators are problematic.

Attrition

Among teachers in Yap State, there are more differentiating reasons for Potential Leavers to leave teaching than there are for school administrators to leave school administration. Many of these reasons—low salaries, not enough school supplies and materials, too many responsibilities—are similar to those identified by Wari (1993) as chronic or habitual concerns associated with attrition.

For school administrators, less than the expected number of respondents leave due to pressure from the community. This implies that community pressure will not be a reason for school administrators to leave within the next two years. Their

reasons for leaving cannot be determined from this analysis.

Burnout

In Yap State, teachers who might leave within the next two years are experiencing more burnout than those who plan to stay. These teachers (Potential Leavers) exhibit a lower level of personal accomplishment, and higher levels of emotional exhaustion and feelings of depersonalization than their non-leaving counterparts. Occupational burnout for Yap State teachers appears to be a factor that might cause them to leave teaching.

Reasons that differentiate Potential Leavers from Non-Leavers include students' bad attitudes, lack of control over school policies, too many disagreements about how to teach, and pressure from the community.

School administrators in Yap State do not appear to experience occupational burnout. Yap school administrators who plan to leave (Potential Leavers) are less emotionally exhausted, feel less depersonalized, and have a higher sense of personal accomplishment than those who plan to stay. These unexpected results raise questions that might warrant further investigation.

V. Limitations

The Challenge of Language and Culture

Conducting research across diverse linguistic and cultural groups is a challenging task. The language in which research is conducted can limit accurate interpretation of results. Expectations regarding task importance and response candor may vary from culture to culture. Thus, results from cross-cultural studies may be difficult to interpret.

While English is the language of wider communication in all of the American-affiliated Pacific entities, respondents to the surveys in this study varied in their use and comprehension of English. For some, English might be a first language; for others, it might be a second or third language, used to a much lesser extent than the vernacular. Thus, particular vocabulary, grammatical structures, or instructions may have been problematic.

To adjust for some of these potential errors in measurement, native language/culture informants, who are members of the R&D Cadre or entity local support teams, provided the following expert assistance:

- developed and piloted questions used in the survey;
- revised potentially confusing items from the Maslach instrument;

- in many cases, administered surveys in group settings, leading respondents through each item, and clarifying meanings upon request; and
- provided translations, where necessary, especially in geographically isolated outer-island settings.

Culture-specific interpretations concerning the importance of research, ways of responding, and the meanings of specific terms might all affect results. R&D Cadre members made special efforts to work with their respective departments or ministries of education and directors to ensure that teachers and school administrators took their responses to the survey seriously. In many cases, entity-wide meetings were held to explain the study, its importance, and the need for truthful data. Because the study was designed by members of each department of education, and was intended to investigate issues of importance to the entity, some support was ensured. The study was discussed at principals' and teachers' meetings; support for administration and data collection was provided by the entity department or ministry of education.

Instrumentation

All data collected in this study came from self-report questionnaires. This method of data collection was selected because of its perceived advantages for large-scale research. Those advantages include:

- Questionnaires are relatively easy and inexpensive to administer
- Questionnaires can be designed to ensure anonymity
- Respondents answer at their own pace
- Questions are standardized

However, self-report questionnaires also have limitations—responses may not always be truthful or accurate. Some respondents might make careless errors, such as checking the wrong box or writing the incorrect number. They might purposely answer questions with incorrect information because they want to give a favorable impression or avoid potentially embarrassing admissions. Or, they might misinterpret questions and respond inaccurately.

The R&D Cadre pilot-tested the questionnaires in order to improve wording so that respondents might better interpret the meanings of questions. Additionally, directions for completing the questionnaires and administration procedures were purposefully designed to ensure anonymity. However, even with these precautions, hindsight tells us that specific changes might have improved the validity of responses. In particular, the following limitations are noted:

1. Items that required respondents to check boxes on the right were somewhat confusing. The items should have been transposed so that the boxes were on the left.
2. Questions measuring attrition could have been phrased with greater clarity. Rather than asking if the respondents *might* leave and reasons that *might* cause them to leave, perhaps asking whether or not they were *going* to leave and *why* would have provided more definitive information.

3. In order to assure respondents of anonymity and foster truthfulness in responses, surveys did not ask for individuals' names. However, they did request the names of schools. In entities where there are few schools and a limited number of teachers (e.g., one per grade level), this may not have been sufficient to guarantee anonymity, and, consequently, honesty in response.

Analysis

Non-responses to items on the questionnaires could limit the validity of some results. For example, in order to analyze differences between teachers who are Potential Leavers and Non-Leavers, only those who responded to the question "I might leave teaching within the next two years" and each of the reasons for leaving could be included in the analyses (cross-tabulations). In some instances, large portions of the sample did not respond to either the "I might leave" question or one of the reasons.

Therefore, conclusions based on such results may only be generalized on the basis of those who were willing to respond. There may be systematic differences between respondents and non-respondents. For example, if non-respondents were more likely to experience depersonalization at work and, therefore, did not care to respond to all items, then conclusions based on results in which they did not participate would under-identify this risk factor in the population.

Although standardized group administration practices included requests to respond to all items, these requests were not sufficient. Moreover, standardized administration was not always possible.

Non-responses on the Maslach Burnout Inventory were also a problem. In order to calculate each subscale score, all items that contributed to that subscale must have been answered. If a respondent left one item out, the subscale in which that item was included could not be computed. Therefore, the extent of burnout may be underrepresented.

VI. Recommendations

The recommendations provided in this section of the report are based on the general findings concerned with absenteeism, attrition, and stress/burnout among teachers and school administrators in Yap State. Findings in three areas are highlighted: (1) reasons for absences, (2) possible reasons for attrition in the education profession, and (3) comparisons of Potential Leavers and Non-Leavers.

Recommendations Regarding Findings on Absenteeism

The absenteeism rates for teachers and school administrators in Yap State are among the highest of the Pacific entities in this study. Absences for teachers and school administrators were due to a wide range of reasons; the most prevalent were educational leave, and meetings and workshops. It is recommended that serious attention be given to improving the school attendance of Pacific educators in Yap State. Existing policies on attendance should be reviewed for appropriate action. In the absence of policies on attendance, written policies should be developed and consistently implemented. Special attention should be given to policies dealing with educational leave for school personnel during the school year.

Recommendations Regarding Findings on Attrition

1. In Yap State, there are numerous reasons for teachers to leave the teaching profession. Habitual concerns, such as low salaries and stress-related factors, may cause teachers in Yap State to leave. To reduce the teacher attrition rate, it is recommended that a pro-active program focused on stress management be designed and implemented by the department. Staff stability, in turn, could contribute to better student performance and achievement.
2. Future research will be needed to identify reasons why school administrators choose to leave school administration in Yap State.

Recommendations Regarding Findings on Stress/Burnout

Occupational burnout appears to be a problem for teachers in Yap State. To reduce stress and burnout among teachers, it is recommended that a comprehensive program be developed and implemented. Such a program may contribute to improved attendance and well-being of those who work most closely with students.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Cochran, W. G. (1954). Some methods for strengthening the common X^2 tests. *Biometrics*, 10, 417-451.
- DeRobbio, R. A. (1995). *Factors accounting for burnout among secondary school teachers*. Unpublished doctoral dissertation, University of Connecticut.
- DeRobbio, R. A. & Iwanicki, E. (1996, April). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Farber, B. & Ascher, C. (1992). *Urban school restructuring and teacher burnout*. Washington, DC: ERIC Clearinghouse on Urban Education. (ERIC/CUE Digest Number 75). [Online]. Available: <http://ericweb.tc.columbia.edu/digests/dig75.html> [1998, April].
- Hammond, O. & Onikama, D. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning
- Holmes, T. H. & Rahe R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory Human Services Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S., & Schwab, L. (1986). *Maslach Burnout Inventory-Educators Survey*. Palo Alto, CA: Consulting Psychologists Press.
- Merriam-Webster's Collegiate Dictionary (9th ed.). (1997). Springfield, MA: Merriam-Webster.
- Offerman, L. R. (1986). Maslach Burnout Inventory. In E. Keyser & R. Sweetland (Eds.), *Test Critiques, volume III* (pp. 419 - 426). Kansas City, MO: Test Corporation of America.
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in the Pacific region*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning. (1996). *Annual report*. Honolulu, HI: Author.
- Pelletier, K. R. (1977). *Mind as healer, mind as slayer*. New York, NY: Dell.
- Scott, K. D. & Wimbush, J. (1991). Teacher absenteeism in secondary education. *Educational Administration Quarterly*, 27 (4), 506-529.
- Wari, P. (1993). Teacher wastage: The extent and causes. *Papua New Guinea Journal of Education*, 29 (2), 69-84.



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

1099 Alakea Street

25th Floor

Honolulu, Hawai'i 96813

Tel: 808.441.1300

FAX: 808.441.1385

E-mail: askprel@prel.org

WEBSITE: <http://www.prel.org>

RS9907